

## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.

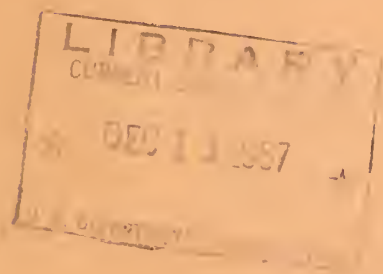


90  
20w8

35 TH ANNUAL  
NATIONAL  
AGRICULTURAL

OUTLOOK  
CONFERENCE

November 18-21, 1957\*  
Washington 25, D.C. \*



UNITED STATES DEPARTMENT OF AGRICULTURE

Agricultural Marketing Service • Agricultural Research Service  
Commodity Stabilization Service • Foreign Agricultural Service  
Forest Service • Federal Extension Service Cooperating





235690

MONDAY (November 18) MORNING

(Thomas Jefferson Auditorium - South Building)

C. M. Ferguson, Administrator  
Federal Extension Service, Chairman

9:00 Registration

*papers  
marked*  
9:45 ° Opening of Conference

C. M. Ferguson

10:00 ✓ World Situation as it Affects  
the Outlook for Agriculture

John W. Evans, Deputy Director  
Office of Intelligence Research  
Department of State

11:00 Intermission

11:15 ° Panel Discussion - Raymond A. Ioanes, Deputy Administrator  
Foreign Agricultural Service, Moderator

*to prepared  
statements*

John W. Evans, Deputy Director  
Office of Intelligence Research  
Department of State

Lamar Fleming, Jr.  
Chairman of Board  
Anderson, Clayton, and Company

Leslie Crawford  
Foreign Agricultural Attache  
Great Britain

Loring Macy, Director  
Bureau of Foreign Commerce  
Department of Commerce

Gwynn Garnett, Administrator  
Foreign Agricultural Service

12:30 - 2:00 Lunch time

AEP - 214 (11-57)

MONDAY (November 18) AFTERNOON

(Thomas Jefferson Auditorium - South Building)

James P. Cavin, Chief  
Statistical and Historical Research Branch  
Agricultural Marketing Service, Chairman

2:00 ✓ National Economic Situation  
and Outlook for 1958

Nathan M. Koffsky, Chief  
Farm Income Branch  
Agricultural Marketing Service

2:30 ° Panel Discussion - James P. Cavin, Moderator

*prepared  
statements*  
Nathan M. Koffsky  
Agricultural Marketing Service

James W. Knowles  
Joint Economic Committee

V. Lewis Bassie, Director  
Bureau of Economics and  
Business Research  
University of Illinois

Louis J. Paradiso, Assistant  
Director-Chief Statistician  
Office of Business Economics  
Department of Commerce

✓ Gerhard Colm, Chief Economist  
National Planning Association

4:00 Adjournment

TUESDAY (November 19) MORNING

(Thomas Jefferson Auditorium - South Building)

Bushrod W. Allin, Chairman of Outlook and Situation Board  
Agricultural Marketing Service, Chairman

9:15 ✓ Agricultural Outlook for 1958

Fred V. Waugh, Director  
Agricultural Economics Division  
Agricultural Marketing Service

10:00 Intermission

10:15 ° Panel Discussion - Bushrod W. Allin, Moderator

*is prepared  
statements*  
Fred V. Waugh

Faith Clark, Chief, Household  
Economics Research Division  
Agricultural Research Service

Kenneth L. Bachman, Head  
Production Income and Costs  
Section  
Agricultural Research Service

Raymond A. Ioanes  
Deputy Administrator  
Foreign Agricultural Service

William H. Scofield, In Charge  
Land Values Unit  
Agricultural Research Service

Norman J. Wall, Head  
Agricultural Finance Section  
Agricultural Research Service

12:00 - 1:30 Lunch time

TUESDAY (November 19) AFTERNOON

✓ (Thomas Jefferson Auditorium - South Building)

"Effects of Marketing Changes on the Outlook"

Harry C. Trelogan, Director of Marketing Research  
Division, Agricultural Marketing Service, Chairman

- 1:30 ✓ Developments in Human Nutrition Ruth M. Leverton, Asst. Director  
Human Nutrition Research  
Division  
Agricultural Research Service
- 2:00 ✓ Marketing Costs D. Barton De Loach, Chief  
Market Organization and Costs  
Branch  
Agricultural Marketing Service
- 2:30 ✓ Domestic Market Development Robert M. Walsh, Chief  
Market Development Branch  
Agricultural Marketing Service
- 3:00 ✓ Foreign Market Development Raymond A. Ioanes  
Deputy Administrator  
Foreign Agricultural Service
- 3:30 Intermission
- 3:45 ◊ Panel Discussion - Harry C. Trelogan, Moderator
- prepared  
statements  
except  
Knapp's.*
- Ruth M. Leverton Faith Clark
- D. Barton De Loach Walter W. Wilcox  
Legislative Reference Service  
Library of Congress
- Robert M. Walsh
- Raymond A. Ioanes ✓ Joseph G. Knapp, Administrator  
Farmer Cooperative Service
- 5:00 Adjournment

Wednesday, November 20, 1957

Commodity Outlook Sessions for Producers, Handlers and Consumers

9:15 - 10:45 ✓ Grass and Legume Seeds - Room 1345 South Building  
Paul O. Mohn, FES, Chairman  
Outlook Statement: ✓ Thomas J. Kuzelka, AMS  
W. H. Youngman, FAS

✓ Fruits and Tree Nuts - Room 218 Adm. Bldg.  
Lloyd H. Davis, FES, Chairman  
✓ Ben H. Pubols, AMS, Outlook Statement

✓ Cotton - Jefferson Auditorium  
E. P. Callahan, FES, Chairman  
✓ Frank Lowenstein, AMS, Outlook Statement

11:00 - 12:30 ✓ Fats and Oils - Jefferson Auditorium  
Karl G. Shoemaker, FES, Chairman  
✓ George W. Kromer, AMS, Outlook Statement

✓ Vegetables and Potatoes - Room 218 Adm. Bldg.  
R. L. Childress, FES, Chairman  
✓ Will M. Simmons, AMS, Outlook Statement

*Rec'd Demand + price  
situation for  
forest products  
Outlook included)*

✓ Forest Products - Room 3106, South Building  
M. M. Bryan, FS, Chairman  
David B. King, FS, Outlook Statement

12:30 - 2:00 Lunch time

2:00 - 3:30 ✓ Wheat - Room 218 Adm. Bldg.  
T. E. Hall, FES, Chairman  
✓ Robert E. Post, AMS, Outlook Statement

✓ Tobacco - Room 1345 South Building  
S. E. Wrather, AMS, Chairman  
✓ Arthur G. Conover, AMS, Outlook Statement

*no statement*

○ Sugar - Room 4966 South Building  
Lawrence Myers, CSS, Chairman

3:45 - 5:00 ✓ Peanuts - Room 218 Adm. Bldg.  
Karl G. Shoemaker, FES, Chairman  
✓ George W. Kromer, AMS, Outlook Statement

✓ Rice - Room 1345 South Building  
T. E. Hall, FES, Chairman  
✓ Robert E. Post, AMS, Outlook Statement

5:00 Adjournment

5:45 State Specialists' Dinner - 4th Wing Cafeteria  
South Building

Thursday, November 21, 1957

Commodity Outlook Sessions for Producers, Handlers and Consumers

- 9:15 - 12:00 ✓ Feed, Livestock and Meat - Jefferson Auditorium  
Richard G. Ford, FES, Chairman  
Outlook Statement: ✓ Harold F. Breimyer, AMS  
✓ Malcolm Clough, AMS
- 12:00 - 1:30 Lunch time
- 1:30 - 3:00 ✓ Poultry - Jefferson Auditorium  
Homer S. Porteus, FES, Chairman  
✓ Edward Karpoff, AMS, Outlook Statement
- 3:15 - 5:00 Dairy - Jefferson Auditorium  
Max K. Hinds, FES, Chairman  
✓ Herbert C. Kriesel, AMS, Outlook Statement
- 5:00 Adjournment



Wednesday, November 20, 1957

Family Living Sessions

- 9:15 Outlook for Consumer Goods Freer Art Gallery Auditorium  
Starley M. Hunter, FES, Chairman
- ✓ Food Harry Sherr  
Agricultural Economics Div., AMS
- ✓ Clothing *Harry Kahan* - Arnold Chase  
Bureau of Labor Statistics  
Department of Labor
- ✓ Housing and Durable Goods *Arnold Chase* - Harry Kahan  
Bureau of Labor Statistics  
Department of Labor
- ✓ Home Furnishing Starley M. Hunter  
Div. of Home Economics Programs, FES
- 12:30 - 2:00 Lunch time
- "Family Living Trends - Changes in Family Characteristics"  
Faith Clark, ARS, Chairman
- 2:00 ✓ Changes in Population and Gladys K. Bowles  
Family Characteristics Farm Population & Rural Life Branch, AMS
- 2:25 ✓ Overall Situation Margaret L. Brew  
Household Management Section, ARS
- 2:50 ✓ Dwelling Upkeep, Household Jean L. Pennock  
Operations, Furnishings Household Economics Div., ARS  
& Equipment
- 3:15 Intermission
- 3:30 ✓ Transportation, Recreation Emma G. Holmes  
and Education Household Economics Div., ARS
- 3:55 ✓ Clothing, Personal Care Roxanne R. O'Leary  
Household Economics Research Div., ARS
- 4:15 Adjournment

Thursday, November 21, 1957

Family Living Sessions

Room 218 Adm. Bldg.

"Family Living Trends - Changes in Family Characteristics" (Cont'd)  
Margaret L. Brew, ARS, Chairman

- 9:15 ✓ Food Mollie Orshanksy  
Household Economics Research Div., ARS
- 9:45 ✓ Medical Care Jean L. Pennock  
Household Economics Div., ARS
- 10:05 ○ Outlook for Family Living Margaret L. Brew  
Household Management Section, ARS
- 10:15 Intermission
- 10:30 ○ Panel - Implications of Changes in Family Living for  
the Extension Program
- Paul J. Jehlik SESD, ARS Eloise Cofer IHE, ARS  
Helen Johnston, HEW Starley Hunter, FES  
Constance Burgess, Ext. Serv., Cal. John Ellickson FERD, ARS  
Lucille Ketchum, Ext. Serv., Mich.
- 12:30 - 2:00 Lunch time
- 2:00 Commodity Outlook  
Frances Scudder, FES, Chairman
- ✓ Dairy Herbert C. Kreisel, AMS
- Meat Animals Harold Breimyer, AMS
- Methods of Presenting Outlook - Starley M. Hunter, FES
- 4:30 Adjournment

*minimizing risk  
in the use of  
family resources*



STATE DELEGATES REGISTERED FOR 35th OUTLOOK CONFERENCE  
November 18-21, 1957

ALABAMA

Foy Helms, Elizabeth Bryan

ALASKA

None

ARIZONA

George W. Campbell

ARKANSAS

T. E. Atkinson, Crystol Tenborg

CALIFORNIA

Constance Burgess, G. A. Carpenter

COLORADO

Avery Bice

CONNECTICUT

G. A. Ecker, Florence S. Walker

DELAWARE

Patricia Middleton, W. T. McAllister,  
William E. McDaniel

FLORIDA

C. C. Moxley, Susan Christian

GEORGIA

J. J. Lancaster, Doris Oglesby

HAWAII

Stephen Doue

IDAHO

R. Wayne Robinson

ILLINOIS

Catherine M. Sullivan, L. H. Simerl

INDIANA

Carroll Bottum, Ronald Bauman,  
Elkin Mintner

IOWA

Francis Kutish, Helen Tucker

KANSAS

M. E. Jackson, Roger Wilkowske

KENTUCKY

Frances M. Stallard, Buel Lanpher,  
Stephen Allen

LOUISIANA

W. D. Curtis, Rupert Perry

MAINE

Lewis Clark, Pauline Lush

MARYLAND

G. M. Beal, A. B. Hamilton,  
H. H. Hoecker, J. W. Magruder,  
A. R. Meyer, Joanne Reitz,  
G. A. Stevens

MASSACHUSETTS

Barbara Higgins, E. W. Hanczaryk,  
G. W. Westcott, A. H. Lindsey

MICHIGAN

Lucille Ketchum, J. N. Ferris

MINNESOTA

L. J. Pickrel

MISSISSIPPI

None

MISSOURI

C. E. Klingner, Elmer Kiehl, Tom Brown

MONTANA

John Bower, Mae True

NEBRASKA

Everett Peterson, Clara Leopold

NEVADA

Margaret Dial, G. A. Myles

NEW HAMPSHIRE

Ann Beggs, Lawrence Dougherty

NEW JERSEY

Doris Anderson, F. V. Beck,  
Hildreth Flitcraft

NEW MEXICO

J. O. Kling or Clyde R. Keaton

STATE DELEGATES REGISTERED FOR 35th OUTLOOK CONFERENCE (continued)

November 18-21, 1957

NEW YORK

Ruth Deacon, Elizabeth Wiegant,  
George Conneman, L. C. Cunningham,  
B. A. Dominick, Robert Smith,  
Mary Wood, Betty Woods

NORTH CAROLINA

Glenn Tussey, Charles Pugh,  
Mamie Whisnant

NORTH DAKOTA

H. G. Anderson, Irene Crouch

OHIO

Riley Dougan, Robert Schwart,  
Mabel Spray, D. M. Long,  
Anita McCormick

OKLAHOMA

H. E. Ward, Evelyn P. Nantz

OREGON

Oscar Hagg

PENNSYLVANIA

Sanna Black, W. M. Carroll, W. F. Johnstone  
B. W. Kelly, Fred Hughes, M. J. Armes,  
A. K. Birth, A. O. Voigt, C. W. Porter

PUERTO RICO

Roberto Lefebre-Munoz,  
Carmen T. Pesquero-Busquets

RHODE ISLAND

W. H. Wallace, Evelyn Lyman

SOUTH CAROLINA

P. S. Williamon, Ruby M. Craven,  
M. C. Rochester

SOUTH DAKOTA

L. M. Bender, Isabel McGilney

TENNESSEE

Eugene Gambill, Virginia Boswell,  
Irving Dubov, Myra Bishop or  
Phyllis Ilett

TEXAS

J. H. McHaney, Eula J. Newman

UTAH

Leon Michaelson

VERMONT

Verle Houghaboom

VIRGINIA

Helen D. Alverson, Amelia Fuller,  
J. B. Bell, Shirley Carter,  
D. U. Livermore, K. E. Loope,  
W. J. Nuckolls, Jr., J. H. Simpson,  
H. W. Waker

WASHINGTON

Karl Hobson

WEST VIRGINIA

Gladys W. Knapp, K. P. Brundage

WISCONSIN

Louise Young, Leon Garoian

WYOMING

A. W. Willis, Mary McAuley

UNITED STATES DEPARTMENT OF AGRICULTURE  
Federal Extension Service  
Washington 25, D. C.

11/19/57

STATE DELEGATES REGISTERED FOR  
THE 35th ANNUAL AGRICULTURAL OUTLOOK CONFERENCE

ALABAMA

Foy Helms  
Elizabeth Bryan

Hotel

Harrington  
Harrington

HAWAII

Stephen Doue

Hotel

Harrington

ARIZONA

George W. Campbell

Harrington

IDAHO

R. Wayne Robinson

Harrington

ALASKA

Allan Mick

Willard

ILLINOIS

Catherine M. Sullivan Willard  
L. H. Simerl

ARKANSAS

T. E. Atkinson  
Crystol C. Tenborg

Harrington  
Raleigh

INDIANA

Carroll Bottum  
Ronald Bauman  
Elkin Mintner

Harrington  
Harrington  
Harrington

CALIFORNIA

Constance Burgess

Willard

IOWA

Francis Kutish  
Helen Tucker

Harrington  
Harrington

COLORADO

Avery Bice

Raleigh

KANSAS

M. E. Jackson  
Roger Wilkowske  
Ethel Self  
Milton J. Manuel

Harrington  
Harrington  
Harrington

CONNECTICUT

George A. Ecker  
Florence S. Walker

Harrington  
Burlington

DELAWARE

Patricia Middleton  
Willard T. McAllister  
William E. McDaniel

Washington  
Harrington  
Harrington

KENTUCKY

Frances M. Stallard  
Buel F. Lanpher  
Stephen Allen

Harrington  
Harrington  
Harrington

FLORIDA

C. C. Moxley  
Bonnie Carter

Willard  
Harrington

LOUISIANA

W. D. Curtis  
Rupert Perry

Raleigh  
Harrington

GEORGIA

J. J. Lancaster  
Doris Oglesby

Harrington  
Willard

MAINE

Lewis E. Clark  
Pauline E. Lush

Harrington  
Washington

MARYLANDHotel

John W. Magruder  
 Joanne W. Reitz, 1915 Fox St.,  
 Hyattsville, Md.  
 A. B. Hamilton, University of Maryland  
 G. A. Stevens  
 Vivian L. Curmutt  
 George Beal  
 Harold Hoecker  
 Paul Nystrom

MASSACHUSETTS

E. W. Hanczaryk Washington  
 Barbara Higgins Washington  
 G. W. Westcott Burlington  
 R. Bieber Burlington

MICHIGAN

Marie Ferree Washington  
 Lucille Ketchum Willard  
 John N. Ferris Willard  
 Arthur Mauch Harrington

MINNESOTA

Luther Pickrel Cosmos Club  
 Elizabeth Roniger Raleigh

MISSOURI

C. E. Klingner Harrington  
 Elmer Kiehl Harrington  
 Tom Brown Harrington

MONTANA

John Bower Harrington  
 Maurice C. Taylor Harrington

NEBRASKA

Everett Peterson Raleigh  
 Clara N. Leopold Raleigh

NEVADA

Margaret Dial Raleigh  
 George A. Myles Raleigh

NEW HAMPSHIRE

Ann Beggs  
 Lawrence Dougherty

NEW JERSEYHotel

Doris Anderson Willard  
 John Carncross Willard  
 Frank Beck Harrington  
 Hildreth Flitcraft Willard

NEW MEXICO

Clyde R. Keaton

NEW YORK

C. A. Bratton Harrington  
 R. P. Story Raleigh  
 Elizabeth Wiegand Raleigh  
 Mary Wood Raleigh  
 Ruth Deacon Raleigh  
 B. A. Dominick Harrington

NORTH CAROLINA

Mamie Whisnant Harrington  
 Glenn Tussey Harrington  
 Charles Pugh Harrington

NORTH DAKOTA

H. G. Anderson Harrington  
 Irene Crouch Harrington

OHIO

Mabel Spray Willard  
 Riley Dougan Raleigh  
 Robert Schwart Raleigh  
 Don Long Willard  
 Anita McCormick Willard

OKLAHOMA

H. E. Ward Harrington  
 Evelyn P. Nantz Harrington

OREGON

Oscar Hagg

PENNSYLVANIA

Alida Hotchkiss Raleigh  
 William Johnstone Raleigh  
 Helen Bell Washington  
 Wayne Kelly Raleigh  
 William Carroll Raleigh



PUERTO RICOHotel

R. Lefebre-Munoz Harrington  
C. T. Pesquero-Busquets Harrington

WEST VIRGINIAHotel

K. P. Brundage Harrington  
Gladys Knapp Harrington

RHODE ISLAND

Evelyn Lyman  
W. H. Wallace

WISCONSIN

Louise Young Willard  
Leon Garoian Harrington

SOUTH CAROLINA

Ruby M. Craven Harrington  
P. S. Williamon Harrington

WYOMING

A. W. Willis  
Mary McAuley Raleigh

SOUTH DAKOTA

Lyle Bender Harrington  
Isabel McGibney Raleigh

TENNESSEE

Virginia Boswell Harrington  
Eugene Gambill Washington  
Phyllis Ilett Washington

TEXAS

John McHaney Raleigh  
Eula J. Newman

UTAH

Leon Michaelson

VERMONT

Verle Houghaboom

VIRGINIA

Amelia Fuller Washington  
Helen Alverson Washington  
K. E. Loope Harrington  
W. J. Nuckolls, Jr. Harrington  
J. H. Simpson Harrington  
Shirley Carter Harrington  
J. B. Bell Harrington  
H. W. Walker Harrington

WASHINGTON

Karl Hobson Harrington  
A. H. Harrington (Hoobler's)



\* THE AGRICULTURAL OUTLOOK FOR 1958 \*

By

Frederick V. (Vaughn, Agricultural Marketing Service;  
Kenneth L. Bachman, William H. Scofield, Norman J. Wall,  
Faith (Clark, and Margaret L. (Brew, Agricultural Research Service;  
and Raymond A. (Ioanes, Foreign Agricultural Service.  
at the 35th Annual Agricultural Outlook Conference  
Washington, D. C., November 19, 1957

Summary

As of now, our best judgment is that in 1958:

- (1) farmers will get about the same average prices as in 1957;
- (2) agricultural output will remain high, and could well set a new record, depending upon weather;
- (3) further increases in production expenses may largely offset any rise in gross farm income, leaving farm operators' net realized income from farming about the same as in 1957;
- (4) with increasing income from non-farm sources, principally wages and salaries from off-farm employment, and with decreasing numbers of persons on farms, this could mean a slight gain in per capita income of farm people;
- (5) the parity index (prices paid by farmers) is likely to creep up further, resulting in a further slight drop in the parity ratio;
- (6) retail food prices may rise further, because of increases in marketing charges;
- (7) exports of agricultural products will continue high, but will probably be less than in the fiscal year ending June 30, 1957;
- (8) year-end stocks of wheat and cotton may again be reduced, but the carryover of feed grains will increase still further;
- (9) Government payments for price support, for the Soil Bank, and for export programs will continue to be large, but the acreage reserve program will be reduced;
- (10) farm debt will probably continue to rise, but the value of farm assets will increase, too;
- (11) land values will probably rise somewhat, and levels of living of farm families will probably continue to improve, due in part to increased income from non-farm sources.
- (12) food consumption and diets of U. S. families will remain at a relatively high level.

These judgments about the 1958 outlook are based upon three main assumptions, -- assumptions that now seem to us the most realistic, but none of which is certain:

- (1) that the domestic business situation will continue strong, with no substantial letdown in production, prices, or employment;



- (2) that the uncertain international situation will not touch off another burst of inflation; and
- (3) that there will be no major changes in Government programs affecting 1958 farm income.

Looking beyond 1958, the most serious problem confronting American agriculture is to find ways to keep production in balance with market demand at prices considered acceptable to farmers. In the past two years, some progress has been made toward reducing the burdensome stocks of wheat, cotton, and rice. But stocks of feed grains continue to rise, and probably will be still larger at the close of the present feeding season. Sooner or later, farmers will either have to reduce the output of feed grains, or else feed larger amounts to animals, and thereby increase the output of meat, poultry products, and dairy products.

### Prices of Farm Products

The average level of prices received by farmers has now gone up a little for two successive years. So far in 1957, prices have averaged about 3 percent above those in the same months of 1956.

Most of the price gain this year has been in hogs and cattle. Higher hog prices are due to reduced production and marketings. Higher cattle prices reflect a strong demand for feeders and for restocking in former drought areas. But feed-grain prices are substantially below those of a year ago, as a result of increasingly large surpluses.

The most recent reports show that average prices of farm products have fallen since last summer. A downturn in prices during the fall is a normal seasonal occurrence. The October index, while still 3 percent higher than in October 1956, was about 3 percent below that of August 1957. In this period of two months, substantial declines occurred in prices of many important commodities, including hogs, beef cattle, and corn. The parity ratio stood at 81 in October 1957, the same as a year earlier.

Looking ahead to 1958, we think that farmers are likely to get about the same average prices as in 1957. Domestic demand should continue strong. Agricultural exports will continue high, but somewhat less than in 1957. In other words, we expect changes -- both up and down -- in 1958. It would be a rare statistical accident if the 1958 index should average exactly the same as that of 1957. But we think that a small gain, or a small loss, are equally probable on the basis of our present information.

### The Outlook for Principal Commodities

Before considering the outlook for farm income in 1958, we shall summarize the outlook for some of the principal farm commodities.



Prices of cattle are likely to average as high or higher in 1958 as in 1957. Hog prices will likely hold near 1957 levels during the first half of 1958, but lower during the second half as production is expected to increase above 1957. Prices of sheep and lambs may be about the same next year as in 1957.

A slight increase in milk production is expected in 1958, and prices are expected to remain near present levels. Cash receipts from dairy products in 1958 are likely to rise further to a new high.

Egg prices to farmers probably will be higher in 1958 than the estimated 1957 average of 35 cents a dozen; production will reflect a probable reduction in the number of layers. Broiler prices for 1958 are likely to be close to the estimated average price of 19 cents a pound in 1957; however, production is expected to be up slightly. Turkey prices in early 1958 probably will be below 1957 levels. If expected cutbacks in production for 1958 are made, prices of turkeys in the last half of 1958 will be higher than in the last half of this year.

With large supplies of edible fats and oils expected for the 1957-58 marketing year and a strong domestic and foreign demand, prices of butter this fall and winter will average about the same as a year earlier. But prices of lard and vegetable oils (cottonseed and soybean) may be somewhat lower, as increased soybean output will more than offset declines in cottonseed.

With record corn, barley, and sorghum grain supplies, feed grain prices in 1957-58 are expected to average lower than a year earlier, influenced by a record 1957 production indicated in October, and lower price supports than in 1956.

Prospective acreage of wheat for 1958, and excellent moisture conditions for winter wheat, point to another very large crop, possibly in the range of 975-1,000 bushels. At the end of the 1958-59 marketing year, no substantial further declines in the carryover is likely.

Some further reduction in the carryover of rice is expected by August 1, 1958.

Fewer potatoes will be available from now until next spring and prices received by growers should average substantially above those of a year earlier.

The supply of cotton in 1957-58 is expected to be considerably smaller than in the past season. The starting carryover was down 3.3 million bales from a year earlier, and the 1957 crop is smaller than that of 1956. Disappearance is also expected to decline but is likely to exceed production so that the carryover on August 1, 1958 will be below a year earlier.

Cigarette consumption in 1957 is running at a record rate, but the amount of tobacco has declined. Total supply of flue-cured tobacco in 1957-58 is 6 percent below 1956-57, and prices so far are up 7 percent.

### Farm Income

Gross farm income is likely to be a little higher in 1958 than in 1957. But higher costs may cancel most or all of the increase in gross income, leaving net realized farm income about the same as in 1957.

Farm incomes have also risen somewhat since 1955. Realized net farm income in 1957 is expected to be slightly above the 12.1 billion received in 1956, and well above the 11.6 billion in 1955. These figures are not adjusted for the value of changes in inventories. In 1956, net realized farm income was up somewhat from a year earlier. But the value of the inventory change dropped, largely on account of the reduction in cattle numbers. This caused considerable confusion between two statistics: net realized farm income, which went up a little--and net farm income including inventory change, which went down a little. Our Outlook reports have always emphasized net realized farm income, because it indicates the amount of money the farmer has to spend. We expect both of these measures to be a little higher in 1957 than in 1956.

Changes in aggregate net income need to be interpreted against a background including declines in number of farms and declines in number of people on farms, and the increasing amount of nonfarm income received by farm people. Last year, farm people received about one-third of their total net income from nonfarm sources, and the proportion may well be higher in 1957 and 1958.

Per farm and per capita income estimates are not yet available for 1957, but they will show more improvement than the aggregate. The number of farms is declining about 2 percent a year, and the number of people on farms is also declining, perhaps a little faster. The recent release on farm population, by the Bureau of the Census and the Agricultural Marketing Service, indicates that the farm population in April 1957 was down about 8 percent from a year earlier. True, there were special circumstances this year, including the weather which affected the estimate, but it is very unlikely that such a drastic drop in farm population actually took place. For two previous years, the survey indicated that the farm population had increased slightly. This is also unlikely. The sampling error involved in such estimates is quite substantial. We need to interpret these estimates in terms of the longer-run trend which is downward.

Figure 1 shows the per capita incomes of farm and nonfarm people. It involves two scales. The scale measuring the income of farm people is twice the scale for nonfarm people. This is only to make the chart easier to read--since farm people have averaged about one-half the incomes of non-farm people. In recent years, the average income of non-farm people has increased rapidly to record high levels, while per capita incomes of farm people dropped from 1951 to 1955 and have since improved somewhat. The chart suggests that, over the years, farm people generally participate in economic growth and rising levels of living, even though their incomes remain lower than those of the average non-farmer.

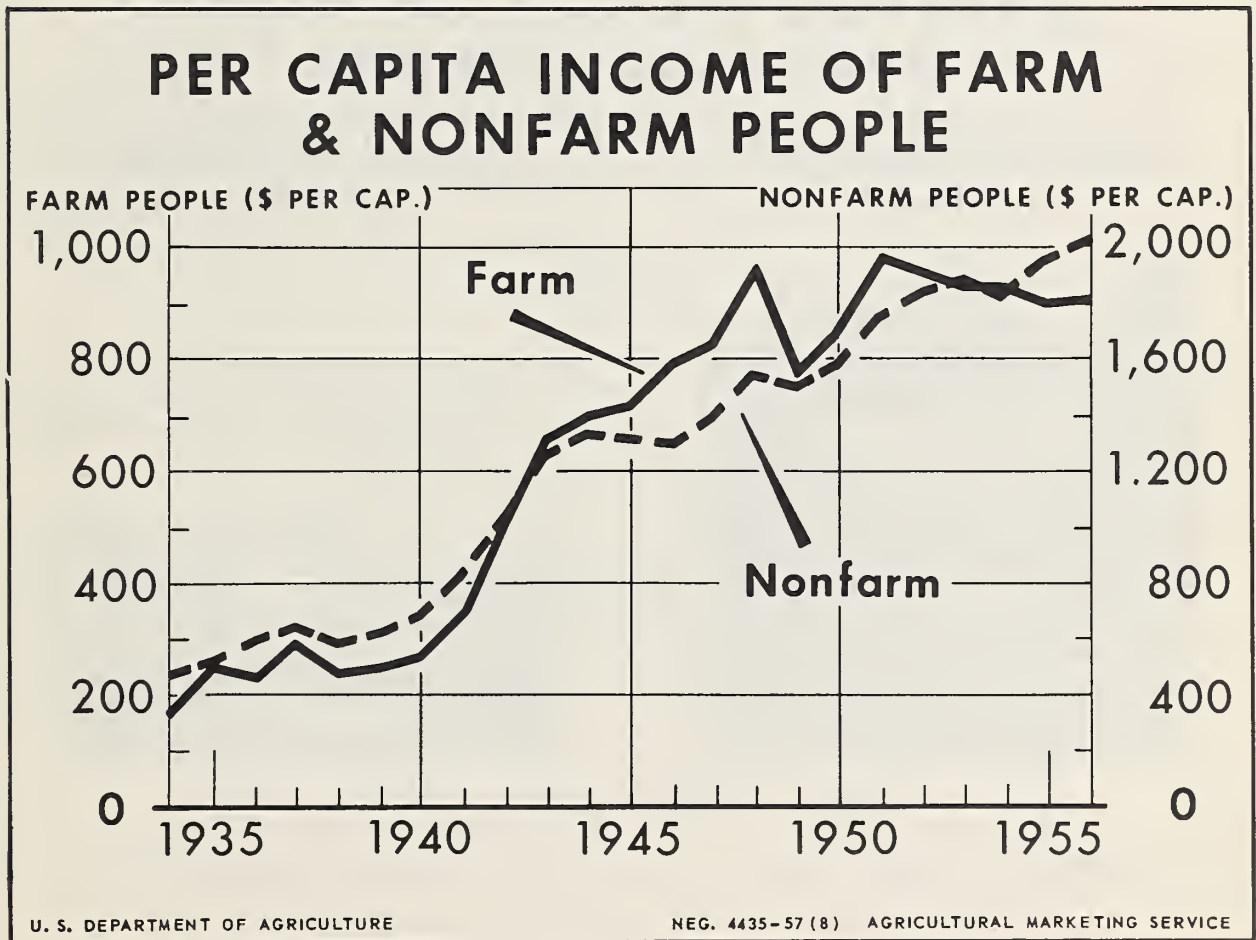


Figure 1

41



Figure 2 presents some new data on the average income of farm operators. These data were prepared for the Joint Economic Committee. The data are not so accurate as we would like, but we think certain trends are significant. All farm families are divided into two categories; those who operate farms with annual sales of 2,500 dollars or more (medium-to-high production farms), and those who operate farms with annual sales of less than 2,500 dollars (low production farms). There are about 2 million medium-to-high production farms and 2 3/4 million low-production farms.

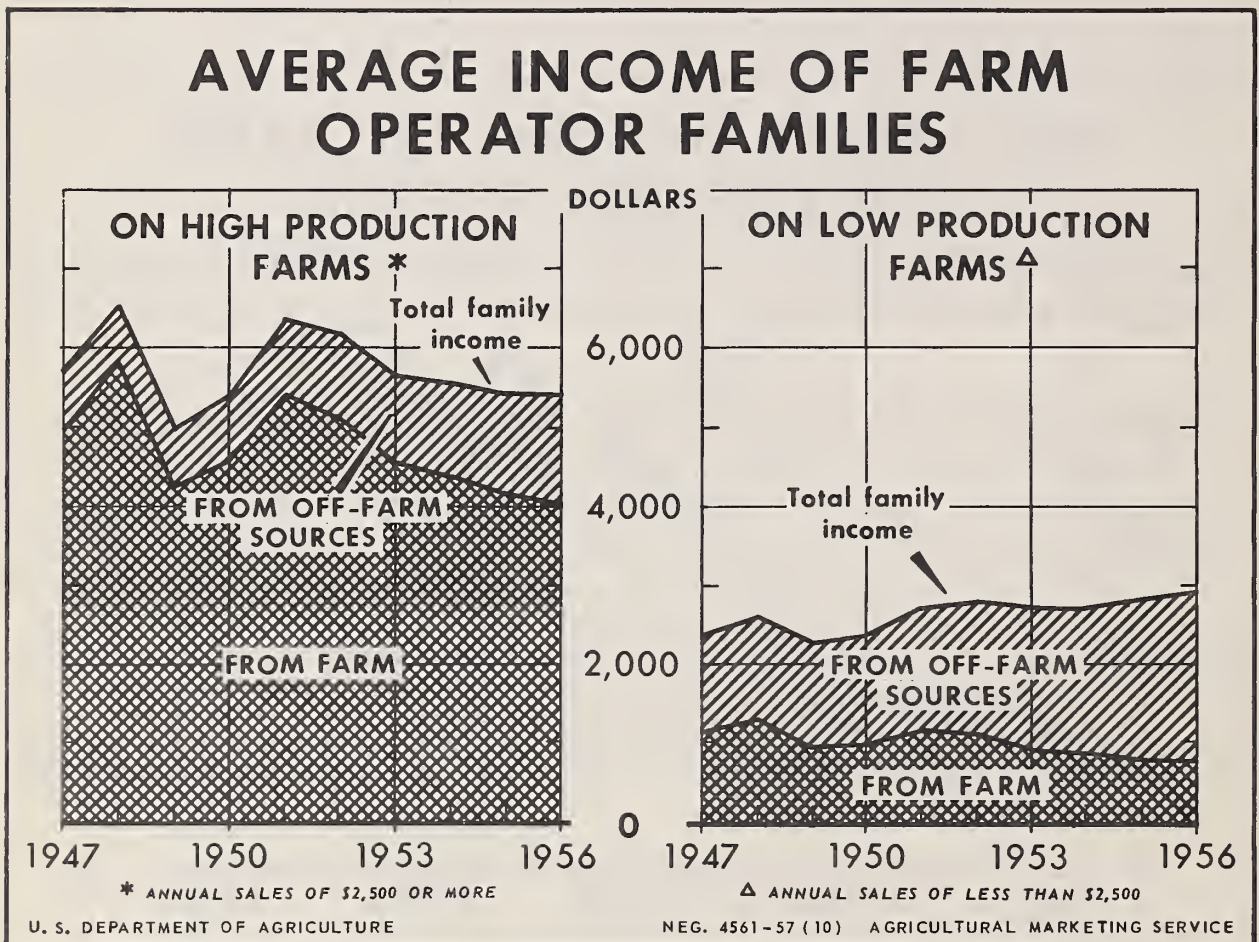


Figure 2

First, the chart shows that the ups and downs of total farm income in the last decade are mirrored in the income from farming for medium-to-high production farms. This is not unexpected. Medium-to-high production farms sell over 90 percent of all farm products sold and thus receive most of the total farm income. Also, the number of farms in this category has remained fairly stable over the past decade. However, farms in the \$2,500 to \$5,000 group have declined 20 percent in the last 15 years. Second, the chart illustrates the rapidly growing importance of off-farm income to the farm family. Even in the case of medium-to-high production farms, off-farm income now accounts for about one-fourth of the total farm family income. This is double the percentage some 10 years earlier. The increase in off-farm income has gone a long way to offset the decline in farm income for these families.

With respect to the low-production farms, these families have increased their total income by means of off-farm income. In 1956, three-fourths of their total income was from off-farm sources. Ten years earlier off-farm income supplied about one-half.

Low-production farms really divide into two groups--those primarily dependent upon farming, which represent the heart of the low-income agricultural problem, and those primarily dependent upon nonfarm sources of income. The decline of about a million in the number of farms over the past decade has been centered in the low production group that is primarily dependent upon agriculture.

#### Farm Costs

The rise in agricultural prices and in farmers' gross incomes during the past two years has been partially offset by a continued rise in prices paid by farmers for the things they buy.

Prices paid by farmers for goods and services used in production in 1957 are likely to set a new high. They have averaged about 4 percent higher than they did in 1956, while prices received have averaged about 3 percent higher. As a result, the parity ratio will probably average a little lower this year than last. The rapid increase in cost rates was due to a general increase in the prices of industrial products bought by farmers and a substantial rise in the price of feeder livestock.

43



Since 1947-49, farm cost rates have gone up nearly a fifth. (See Figure 3.) Farm-produced items are down about 15 percent and have varied with the price of farm products. But prices of factory-produced items used in farm production have increased by 30 percent. In no year during this period have prices of factory-produced items declined. Farm wage rates have increased at about the same rate and interest and taxes have increased even more.

Present indications are that farm-cost rates will probably continue to rise in 1958, but that the increase will be smaller than it was this year. The bulk of farm expenses now go for factory-produced items used in farm production. About 60 percent of all production expenses is for machinery, gasoline, building materials, fertilizer, electricity, and other manufactured goods and services used in farm production. Prices of these factory-produced items are expected to increase less in 1958 than they did from 1956 to 1957.

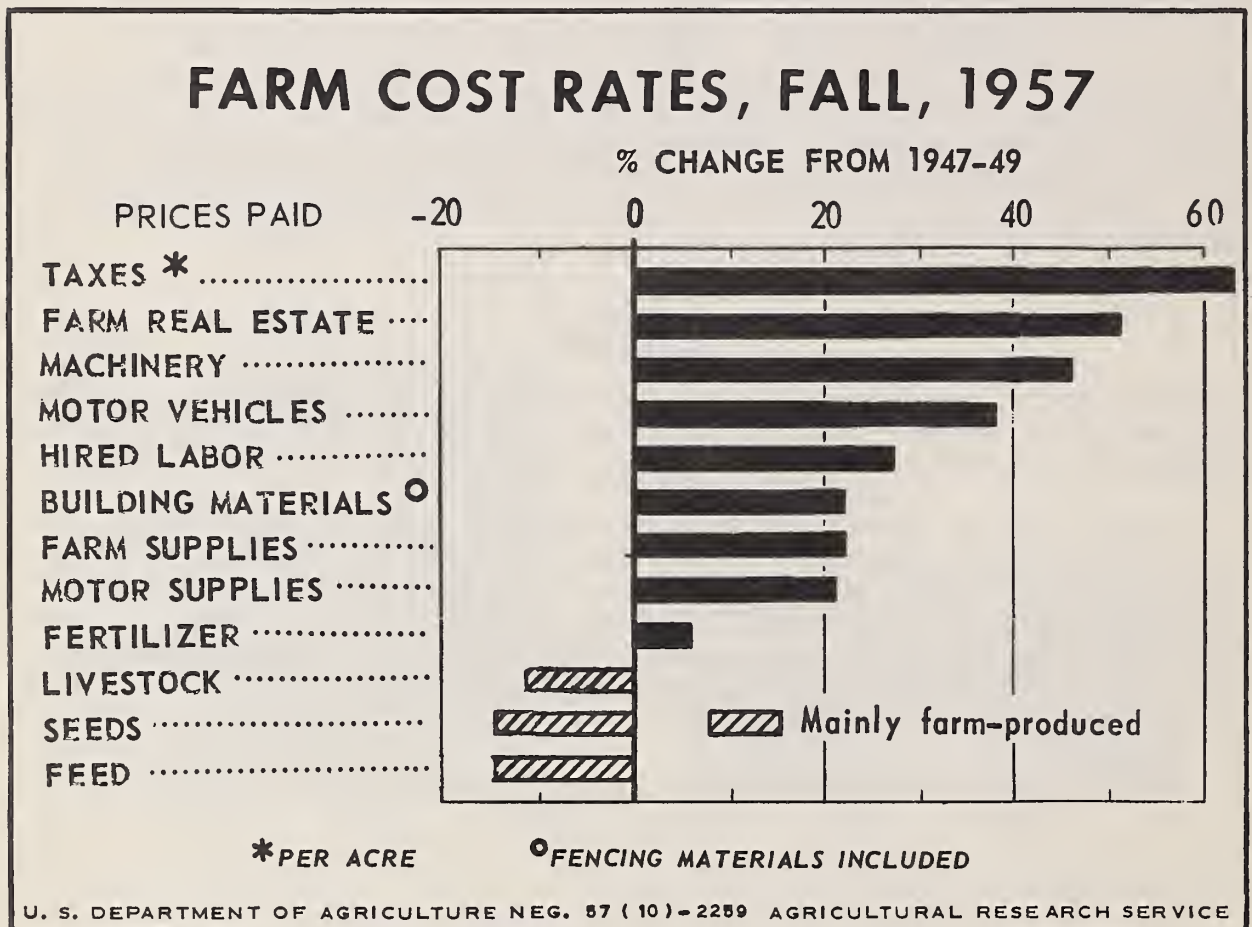


Figure 3

Effects of rises in costs can be alleviated by wise changes in resource use. Since 1947-49, farm expenses per unit of product have gone up less than farm cost rates, and the volume of production per farmer has been increased by nearly a third.

Farmers have found it profitable to make some major changes in resource use during the last quarter of a century, and there is no indication that these basic trends are ending. Two of the basic stimulants for changes in resource use were the developments in technology that provided opportunities to cut costs and the changes in relationships among cost rates. (See Figure 4.) For example, farmers have greatly increased their knowledge of the use of fertilizers. At the same time, fertilizer has become cheaper relative to land and other inputs. Use of fertilizer is now  $3\frac{1}{2}$  times as great as in 1940. New machines have been developed and old machines have been improved. The costs of farm machinery have risen only about half as much as farm wage rates since 1940. In this situation, the use of tractors and other machines has nearly tripled, while the use of labor has been decreasing.

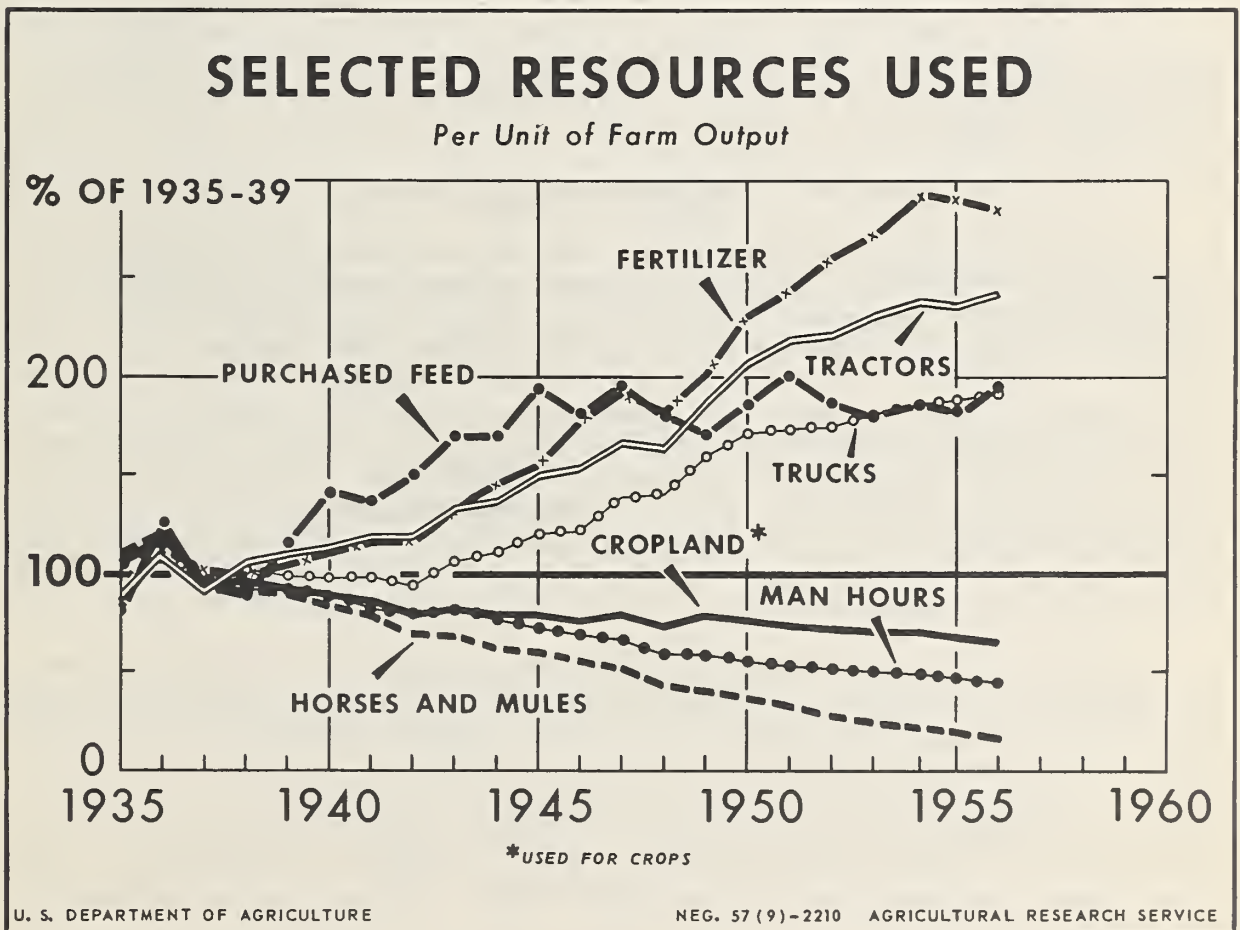


Figure 4

45



Current trends indicate that these changes in resource use are continuing. One of the important reasons why these changes continue in spite of lower prices of farm products lies in the fact that on a going farm the costs per unit of additional production continue much lower than the average costs. Many farmers find they can more fully utilize their existing resources and get additional production at a relatively low cost by adding more acres, more cows, and more fertilizer.

### Marketing Costs

Marketing costs and charges keep rising, too. In the third quarter of 1957, the charges for marketing a typical basket of food were 5 percent higher than a year earlier. The steady climb in marketing charges has been a major reason for the recent rise in retail food costs. True, during the past two years the farmer has got somewhat higher prices for his products. His share of the annual cost of the market basket has risen from \$395 in 1955 to an estimated \$400 this year, an increase of \$5. But marketing charges rose from \$574 to an estimated \$610 in the same period, a rise of \$36.

The rise in marketing costs and charges reflects higher wage rates and higher freight rates. The present outlook is that some of these costs may edge up a little higher in 1958, although the increase may well be less than it was this year.

### Output and Supply

Farm output this year apparently will be just about equal to last year's record high. This is in spite of acreage allotments and the Soil Bank. Improved technology, together with the cost situation discussed earlier, provide a powerful upward push toward continually increased farm output.

Doubtless the Soil Bank was a major factor in reducing crop acreage from 354 million acres in 1955 to 338 million in 1957 -- a drop of almost 5 percent. Moreover, output this year would doubtless have been still higher if there had been no Soil Bank. Even with acreage allotments and the Soil Bank, the total output of our farms remains at, or near, a record high level. And next year we expect fewer acres in the acreage reserve. With average weather, 1958 might well establish another record agricultural output.

On the other hand, carryover stocks of some important commodities were reduced during the past year. CCC investment in inventories and price-support operations on August 31, totaled 6.7 billion dollars, down over 1 billion dollars from the year before. CCC stocks of wheat and cotton have been reduced, primarily because of expanded programs for the sale of cotton at world prices and shipments under Public Law 480 which permits payment in local currencies; but these stocks are still large. Stocks of feed grains, on the other hand, have increased to new record highs. The 1956-57 marketing year



was an exceptional one for our exports, chiefly because of heavy shipments of both wheat and cotton. Large CCC sales to foreign countries of most products for which stocks have been large do not affect the domestic price structure currently. Their immediate effect is rather to reduce stocks and reduce Government carrying costs.

We expect stocks of wheat and cotton to be reduced further by the end of the present marketing year. But the carryover of corn and other feed grains will doubtless increase still more. And the prospects for a general reduction in stocks of farm products in 1958-59 are not bright.

### Agricultural Exports

The prospect is that we will have another good agricultural export year.

Agricultural exports will not be so high in fiscal year 1958 as they were last year when they set a new value record of \$4.7 billion. Nevertheless we can expect a year that will rank either second, or possibly third, highest in history, with exports of about \$4 billion. Exports under Government programs will continue large in 1958.

The prospective drop in total exports this year is coming about mainly because of three commodities--cotton, wheat, and rice. Last year, exports of each were unusually high. Wheat and rice exports set new records, and cotton exports were highest in a quarter of a century. Although we expect exports of each to be smaller this year, they will remain above the postwar average.

In this case of cotton, a new export program had delayed some exports from the previous year so that they showed up instead in last year's record total. This year's cotton exports will not be boosted by any such deferred demand and in fact, foreign stocks may decline somewhat. In the case of wheat, Europe was a better market last year because of its own poor wheat crop, whereas this year its crop is good and there will be less need for wheat imports. In the case of rice, it was largely the accumulated surplus which moved into export last year through special government export programs, and this year export availabilities will be smaller. Exports of soybeans and feed grains will be above last year, while sales of tobacco, livestock products and fruits should remain relatively high.

An important factor in our export outlook is the financial position of countries which buy farm products through commercial channels for dollars. Some of our important customers suffered declines in their liquid assets last

year and efforts to rebuild their gold and dollar holdings may tend to hinder our exports. On the other hand many countries depend largely on our government export programs to finance their imports from the U. S. About 2/5 of the total value of agricultural exports in the past two years moved under three of these programs: Sales for foreign currencies, grants, and barter. (See Figure 5.) In 1957-58 exports under foreign currency sales, donations, and emergency relief programs should remain a high proportion of total exports, especially for wheat, feed grains, cotton, vegetable oils and dairy products. Exports under barter transactions are expected to drop sharply, but there should be some corresponding shift to dollar sales. CCC sales at competitive world prices will assist both dollar and non-dollar exports.

Weather is another factor that always affects our exports. Last year, for example, much wheat was used as livestock feed in Europe, and replacement wheat was imported for food. This year drought has reduced the wheat crop in Australia and Canada, but Europe has a good crop of food wheat and probably will look to us for more feed grains. Our exports of feed grains will also rise because of poor crops in Central America and on the West Coast of South America.

In appraising exports, just as in appraising domestic demand, we have the plus factors of high foreign economic activity and expanding populations. These factors tend both to expand our markets and to reduce our competition.

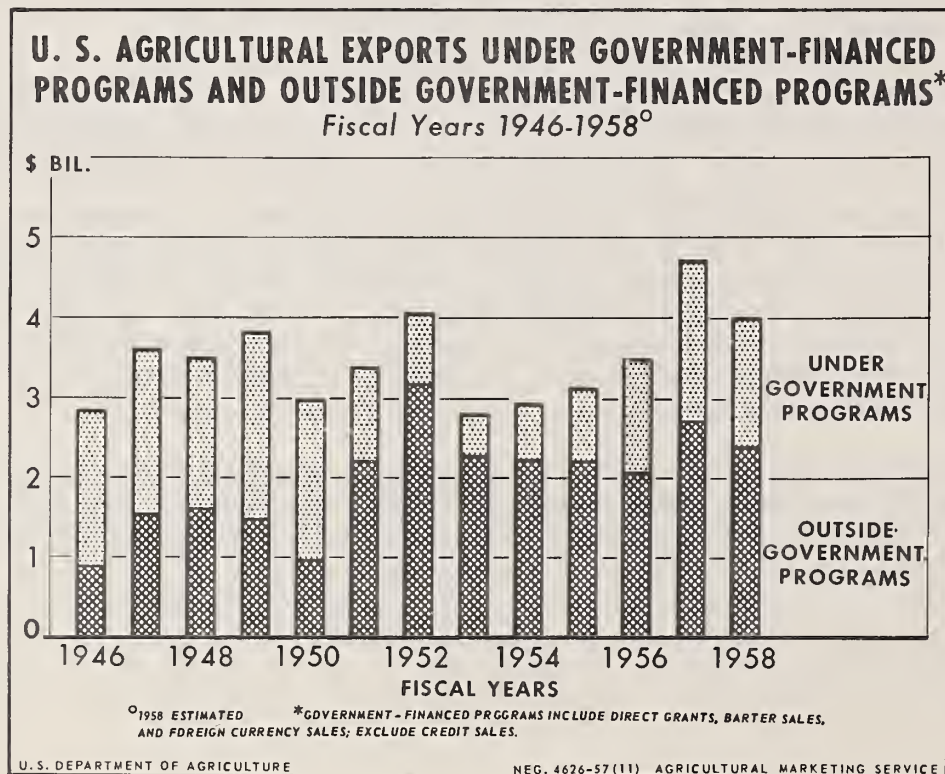


Figure 5



Another factor to consider is the international political situation. In times of severe tension, such as the Korean conflict, scare-buying is prevalent in the world market. Continuing political uncertainty is reflected mostly in a desire of importing nations to maintain -- within their financial ability -- substantial stocks of commodities.

The efforts to reduce foreign trade restrictions under the trade agreement program and the foreign market development work now being done in behalf of American farm products, have both immediate and long-range effects on the level of our exports.

### Farm Real Estate

Average market values of farm real estate have advanced persistently in the past 4 years. (See Figure 6.) This is the longest period in 45 years of record in which such a rise has not been supported by a corresponding upward trend in farm income. Land values have increased 20 percent from early 1954 to November 1957, whereas net farm income in 1956 was 13 percent below that of 1953.

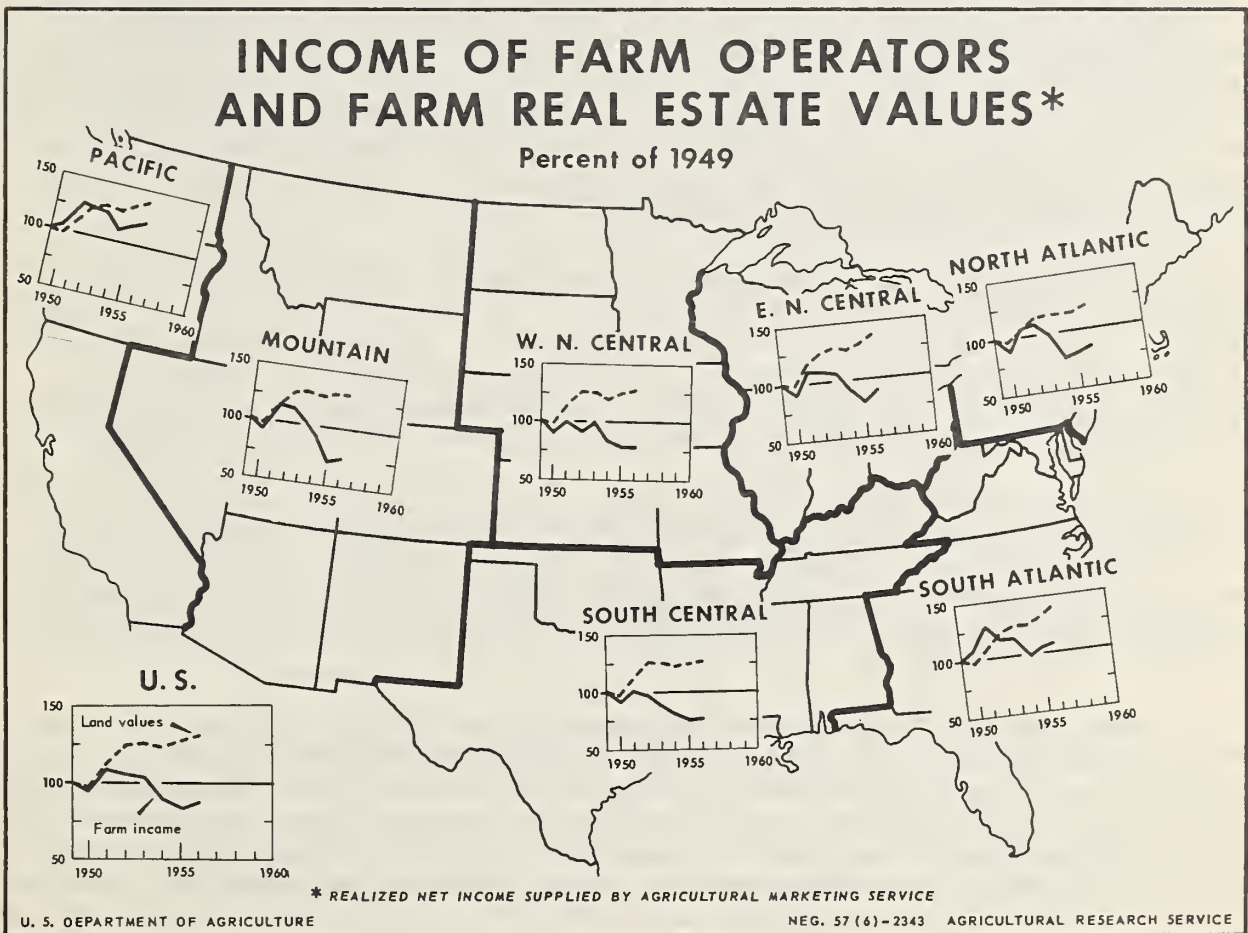


Figure 6

49

Advancing farm technology and the buoyant general economy provide the major explanation for this paradox. The rapid strides made in farm technology in recent years has generated strong demand for additional land on the part of many farm operators. Many farmers have sufficient equipment and labor to operate additional land, and can afford to pay more than would be justified if the land was to be operated as a complete unit.

The steady decline in the purchasing power of money, and the increasing needs for space for a growing population are the primary forces in the non-farm economy that have pushed land values upward. Farmland has provided excellent protection against inflation, having risen about 50 percent more than the general price level since 1940.

High levels of nonfarm income and employment, improved highways and enhanced amenities of country living have contributed to the accelerated rate of dispersal of population and industry into previously rural areas. The non-farm demand for land arising from these factors bears little relation to the income to be expected from farming. Actual and anticipated nonfarm uses for land have become the basis for market prices in substantial areas of the country, notably the Northeast, and in Florida and California.

Traditionally, people have held strong beliefs and value judgments concerning the desirability of owning land. Although these views were temporarily changed during the 1930's, they have again become evident during and since World War II. They have become more deeply rooted in recent years because of the sustained growth in the general economy and the widespread belief that the upturn in the rate of population growth will assure a rising demand for land to provide food, fiber and living space.

Are these views justified? Perhaps not enough consideration is being given to our present production potential and to the possibilities of future gains in technology which would permit our present land area to support a much larger population than at present. Although our land area is fixed, the phenomenal increase in output in recent decades raises the strong probability that agricultural production is likely to keep pace with population growth.

The growing conviction of many people that some type of governmental assistance to agriculture will continue has contributed much to the strength of land values in recent years. It will continue to be a significant market factor in the future. The exact nature of these programs, such as the method and level of price supports, is probably less important than the stabilizing influence they provide for farm income.

The pressure to enlarge existing farms will doubtless continue for several years. Many thousands of commercial farms are still too small for the most efficient use of presently known production techniques. With the spread in net farm income between the least efficient and the most efficient operators becoming wider, those who are most successful in adopting technological advances can easily provide effective demand for the relatively few tracts of land that



come on the market each year. Market forces are likely to capitalize much of the increase in income realized from fertilizer, irrigation and better management practices into the price of land.

We think that farmland values will probably continue to advance in 1958 because most of the forces that have pushed values upward the past several years will still be present. The increase may be a little less in 1957.

### Agricultural Finance

A nationwide survey made this fall reveals that the general financial and credit situation of farmers is about the same or slightly better than last year. But costs are higher for both production and living items. Property taxes continue to rise. Farmers in general are trying to curtail expenditures and become more efficient in their operations. In many instances machinery and equipment are repaired, rather than replaced, and there may be less spending on farm improvements. But farm property is not neglected and there is no evidence that machinery and buildings are becoming rundown except in marginal areas where the situation is not new.

The cash, bank deposits, and other liquid financial assets owned by farmers have changed little from a year ago, but may be a little lower. High costs, the job of getting operations back toward normal in the old drought areas, and low incomes have made it difficult for many farmers to save much money so far this year. Their financial assets may possibly improve toward the end of 1957 as more farm products are marketed.

One of the most widely noted developments in 1957 was the general rise in farm loan interest rates. It affected most types of lenders making both long-term and short-term loans. Increases from a year earlier probably averaged  $\frac{1}{2}$  to 1 percentage point. The availability of credit, however, has not tightened greatly.

The demand for long-term credit has decreased, mainly because of fewer farm transfers, less need to refinance short-term debts and a reluctance to make long-term commitments at the currently high interest rates. Nevertheless farm-mortgage debt continues to rise but at a slower rate than in recent years. The demand for short-term credit increased in the country as a whole, largely because of higher operating costs, an increased demand for feeder cattle, and the use of more short-term credit for long-term purposes in the hope that interest rates on farm mortgages will become more favorable. Notwithstanding the greater use of short-term credit, repayments appear large and the outstanding debt will not change much this year.

On the whole, the financial situation of farmers in 1958 will likely be much the same as in 1957. The probable effects on farmers as a whole will be: A further rise in debt but at a slower rate than in recent years; a relatively low level of delinquency and very few foreclosures; little increase, if any, in the amount of financial savings; and generally strong net worths for many, primarily because of high values of land and other capital investments. It is estimated that at the beginning of 1958 owner equities in agriculture will total \$168.4 billion, nearly 7 percent above a year earlier.

51

The group whose financial position will be most adversely affected will be the smaller and less efficient producers. They will continue to have difficulty in making a satisfactory living, to say nothing of financial progress, from farming alone. Additional numbers of this group will quit farming for industry in 1958. Many other small farmers will seek supplemental part-time income from nonfarm sources.

### Farm Family Living

Farm families have increased their consumption and improved their levels of living markedly during the past decade and a half. In 1955, they were spending for current consumption approximately two-thirds more than in 1941, in dollars of constant purchasing power. During this 15 year period the AMS Farm-Operator Family Level of Living Indexes showed marked gains.

Last year, 94 percent of the farm dwellings had electricity, whereas in 1940 only one-third of farm homes were electrified, and the figure was only 11 percent as recently as 1935. The proportion of farm dwellings with piped running water increased from about one-fifth in 1940 to nearly two-thirds last year. Mechanical refrigerators were in only about 15 percent of farm homes in 1940; 90 percent of the farm-operator families owned them early last year. Farm families have better and more varied diets now than in pre-World War II years, and they are using foods that are easier for the homemaker to prepare. (See Figure 7.)

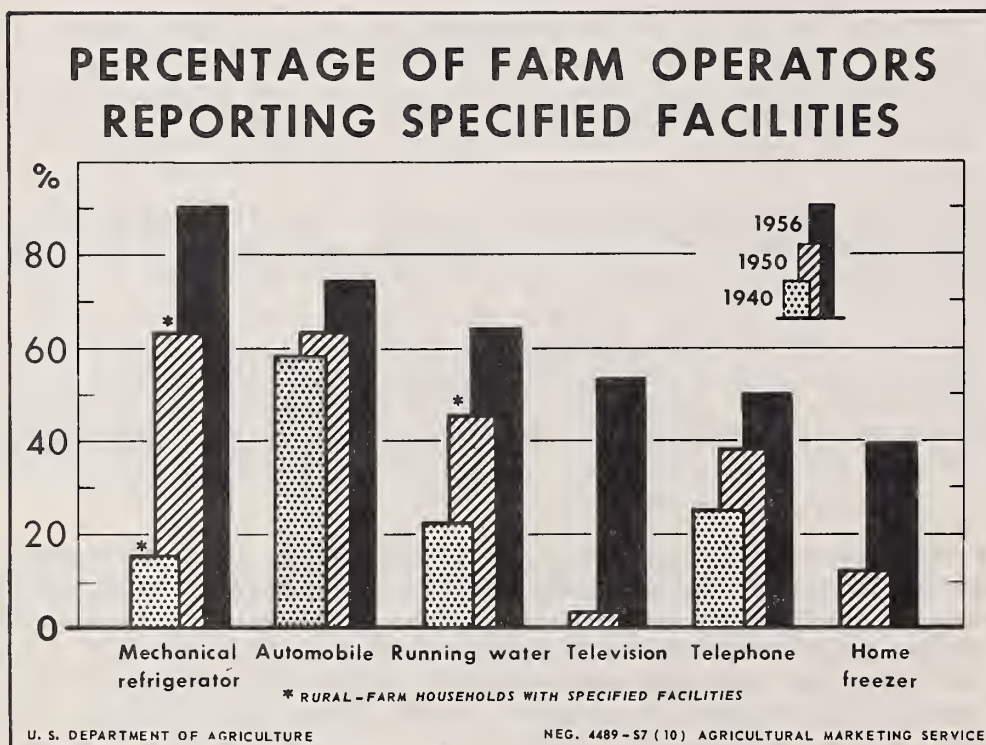


Figure 7



Farm families will continue to improve their levels of living as resources are available to them. The rural community as an isolated cultural unit is fast disappearing. About half the farm operators have off-farm employment, one-fourth of the farm wives are in the labor force, two thirds of the farms are located on all-weather roads, over half of the farm-operator families have TV sets. Urban influences, therefore, are considerable, and farm families want the household goods and services that urban families have.

The varied sources of income that many farm families now have and will continue to have in 1958 serve as a stabilizing force in their demand for goods and services. A regular paycheck gives families **confidence** to use funds that they have available for large-item expenditures. They feel more sure that their ongoing needs for food and other nondurable goods can be met.

Another stabilizing force in farm family levels of living is the opportunity they now have to come into the Social Security program. By mid-1958, about one-half million families who have paid taxes on self-employment income from agriculture will be receiving OASI benefits. While the aggregate income received from this source will be only a small portion of the aggregate income of farm families, its effects will be more widespread than the amount would indicate. Fewer parents will be encroaching on the needs of young families. Levels of living will be maintained for a substantial portion of farmers aged 65 and over who received benefit payments. Furthermore, the psychological effect even on those not yet receiving benefits must be great. For a small payment, farm families, like urban families, will be provided with some protection against the risks of extended old age or the death of the breadwinner. Farmers are likely to feel less urgency to trim their current consumption in order to ensure against privation in later years.

While levels of living are improving and expenditures for current consumption increasing, farm families are being pressed by rising prices for consumer goods. In each of the past two years (i. e. Sept. to Sept.), prices that farmers pay for family living items have increased at the rate of 2-3 percent per year. The present forecast is for some further price increases in 1958.

#### Family Food Consumption

Though higher food prices doubtless have had some effect on the food spending of both farm and nonfarm families, especially those with lower incomes, food consumption and family diets have been at a relatively high level in 1957.

Considerable improvement in family diets has taken place in this country in the past several decades. In the 1930's when a large-scale dietary survey was made, a third of the diets were classed as "poor." Today in scarcely more than one-tenth of the households can diets be called "poor" by the standards used in the earlier period. Most all of the improvement, however, took place between the mid-thirties and the early postwar period.

53

We still have much to do to bring the quality of family diets up to nutritional goals. Considerable numbers of families have diets that do not meet the recommendations of nutritionists. More about the need for dietary improvement and its implications for agriculture will be given in a talk this afternoon.

The average dietary level in 1958 is expected to be much the same as this year. The most encouraging thing is a slight uptrend in vitamin C, the result of an uptrend in the forecast for the consumption of some fruits, especially citrus, and some of the vegetables. This upward movement is all to the good because the vitamin C level of our national per capita food consumption has been drifting downward. Also because the amounts of vitamin C in the diets of many families are below recommended levels.

Eating of meals away from home and the use of the so-called convenience foods seem to be here to stay--at least so long as incomes remain high. Homemakers seem willing to trade money for time. The 1955 survey suggests that at least in one category of products--flour mixes--they make the most use of those that cost them the least for the time saved. Should consumer purchasing power decline, those mixes, and in general those foods that have a relatively low ratio of time saved to money spent, may be expected to suffer in the competition for the family food dollar.

#### Government Programs

Since 1951, when farm incomes started to drop, government programs to help farmers have greatly increased in scope, size, and cost.

Soil Bank payments in calendar 1957 are estimated at about 700 million dollars. That is close to the increase in net realized farm income from 1955 to 1957. The agricultural export program under P.L. 480 is costing around 1.3 billion dollars this fiscal year. Furthermore, the realized cost of the CCC price support operations in fiscal year 1956-57 was 1.3 billion dollars.

In 1958, government programs for agriculture will continue large. Payments under the acreage-reserve part of the Soil Bank will decrease, but payments under the conservation-reserve part should increase.

No major changes in agricultural policies and programs in 1958 can be foreseen at the present time.

#### The Problem of Agricultural Adjustment

Looking beyond 1958, American agriculture will continue to face the difficult problem of balancing production and market demand at remunerative prices. For several years ahead, our problem is likely to be one of surpluses--not shortages.

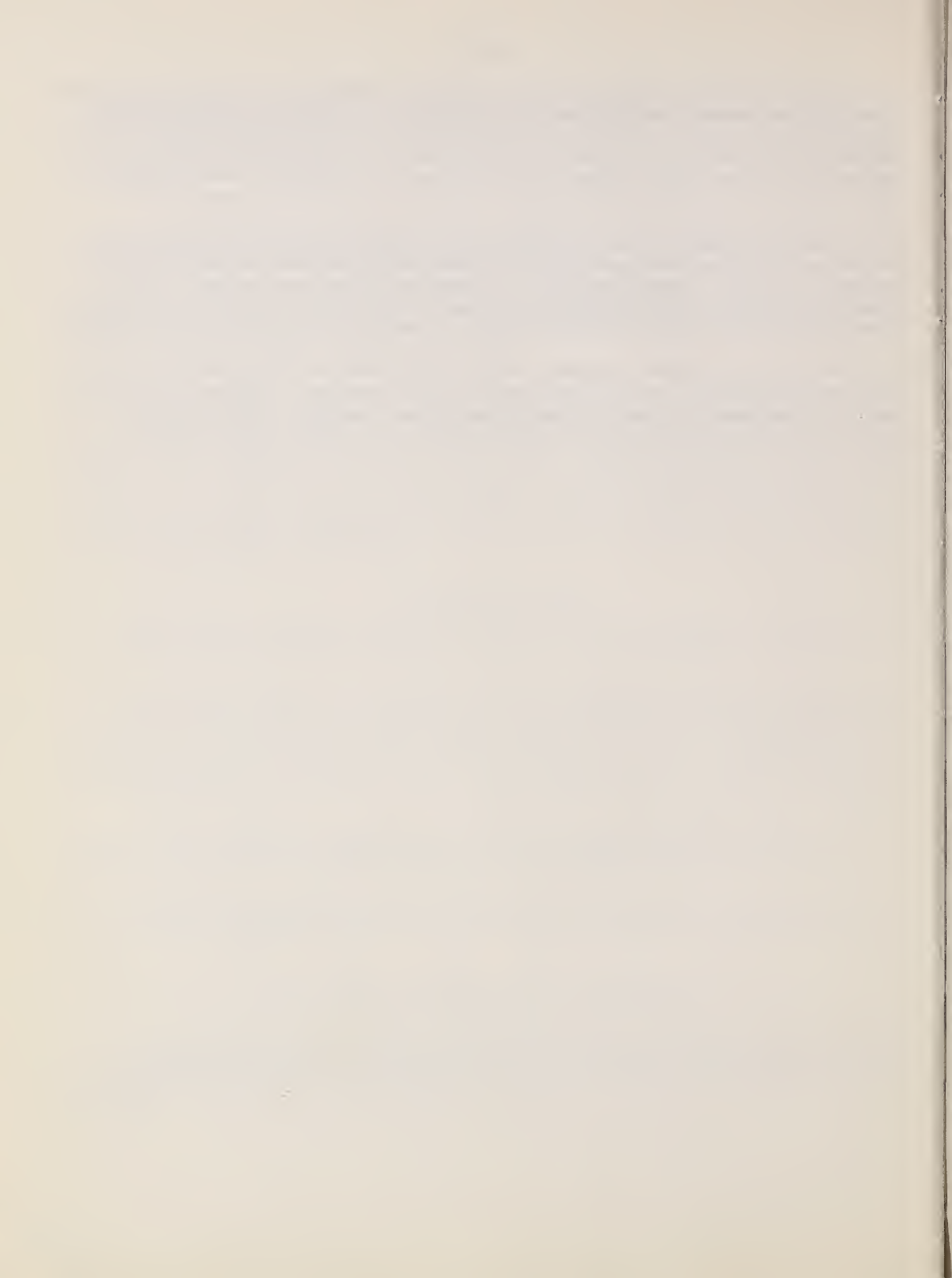


So far, neither individual farmers nor the Department of Agriculture have been able to control production very effectively. Experience with the Soil Bank has demonstrated once again the difficulty of preventing surpluses by attempting to reduce the output of farm products. Possibly more effective methods of control may be found in the future. For example, there is now some interest in quantity allotments, in place of acreage allotments.

Some real progress has been made with programs to increase consumption. The 480 program has been markedly successful in stimulating exports of farm products. In the domestic market, the Department continues to move large quantities of food into consumption through school lunches, school milk programs, and distribution of surplus foods to institutions and to needy families.

But, with all these programs, we are still faced with surpluses - especially of feed grains. We face two possible alternatives - neither of them easy. One is to decrease the production of feed grains sharply. The other is to increase the output of livestock products beyond previous record levels.

55



UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Research Service  
Institute of Home Economics

CHANGES IN FAMILY SPENDING--HOUSING

By Jean Pennock, Home Economist

A high level of expenditure on the housing categories--furnishings and equipment, household operation and dwelling upkeep--seems to be characteristic of a high level of living, and farm families in 1955 could be said to be spending on such a level. In that year expenditures for furnishings and equipment averaged \$219 per family, for household operation \$289, and for dwelling upkeep \$71 (table 1).

Furnishings and equipment

As I worked on the data available for this presentation, it became evident that furnishings and equipment is the logical place to begin this discussion. What families have in the way of furnishings appears to have considerable influence on what they spend to run their houses, and both may have some influence on what they spend on the house itself.

From 1941 to 1955 expenditures for furnishings and equipment more than tripled. When, however, expenditures are put in terms of dollars of constant purchasing power (by adjusting by the AMS Index of Prices Paid by Farmers for Goods and Services Used in Family Living), there is less difference; on this basis families were spending about twice as much in 1955 as in 1941.

Over this period farm families increased their spending for furnishings and equipment at about the same rate as for total consumption (table 2). Consequently this category has maintained the same position in the budget.

Looking at the detail of spending for furnishings and equipment, we find that kitchen, cleaning, and laundry equipment was the most important component of the category in 1941 (table 3). It maintained this position in 1955 but declined considerably in importance. The explanation lies partly in the fact that some of the more expensive pieces of mechanical equipment are now owned by almost all farm families. Consequently buying of these items is now largely confined to replacement purchases and is therefore at a lower level than in 1941. For example, the proportion buying mechanical refrigerators was somewhat smaller in 1955 than in 1941--5 as compared with 7 percent--but in the later year 90 percent reported owning a refrigerator.

You can see this shift in what families buy in the process of taking place if you look at the regional data for 1955. In the North Central region, which has been relatively high in the ownership of equipment for some time, only 21 percent of the furnishings and equipment dollar went for major equipment--refrigerators, ranges, washers, and things like that. The South, however, which has lagged in ownership of equipment, has been buying these major items more heavily, using 32 cents out of the furnishings and equipment dollar. Not only is a larger proportion of the furnishings and equipment dollar going for these major items in the South, even though Southern families spend less than the North Central families for furnishings and equipment, as a whole, their dollar expenditures for them are heavier. The North Central region has gone on to the next step in the stocking-up process. There in 1955 the buying of minor kitchen, cleaning, and laundry equipment, which includes the smaller electrical kitchen equipment--such things as toasters, mixers, electric frypans, coffee makers and the like--, took more of the dollar than among the farm population as a whole.

The transfer from initial to replacement buying only partly accounts for the decrease in the proportion of the furnishings and equipment dollar spent for equipment, however, since buying in 1955 was not lower than in 1941 for some kinds of equipment. Inasmuch as 84 percent of the families in the 1955 survey reported owning washing machines, it can be presumed that most purchases of this item made in 1955 were in the class of replacement buying, yet a larger proportion of families bought in 1955 than in 1941. Here the advantages of the automatic models over the wringer and spin-dryer types probably have acted to speed up replacement. Then there are other items of major equipment which have not begun to approach the saturation point in the farm market--vacuum cleaners, freezers, and mechanical dryers, for example.

To explain the position of equipment in the furnishings budget, it is also necessary to look elsewhere. It isn't that families were spending less than formerly for equipment--in actual fact they were spending almost three times as much. Rather, though they have increased their expenditures for equipment, they made even greater increases in spending for other kinds of furnishings. It is in the furniture group that these greater increases have been made. Spending here in 1955 was almost 5 times the level of 1941--\$53 per family as compared with \$11. The proportion of families buying furniture of one kind or another more than doubled between 1941 and 1955.

Still a third factor operating to shift the importance of the furnishings and equipment groups in the family budget is changes in the price structure. Prices of equipment, as measured by the AMS index, have risen considerably less than have prices of furniture.

In making expenditure studies we traditionally collect data on the possession of a few facilities and items of equipment that can be considered significant of the level of living. I would like to present these data from the 1955 survey here (handling the facilities items, which technically belong under a consideration of the dwelling proper, at the same time), generalizing to give an indication of which families are most likely to have these items.



The items of equipment covered in the 1955 survey I have already mentioned--mechanical refrigerators--owned by 90 percent of the families--, mechanical washing machines--owned by about 85 percent--, and freezers--owned by about 40 percent. In addition, there is electricity, reported by 92 percent, and running water in the dwelling, reported by 64 percent. In general, families in the West are most likely to have these things and families in the South least likely. Families tend to get them fairly early in the family life cycle; as families move through the middle span of the life cycle there is little change in the rate of possession. Older families, on the other hand, are less likely to have these items. I do not mean to imply that most older families are without these conveniences; usually the level is only slightly below the level of the plateau maintained through the preceding intervals, but the level in the later years is noticeable as a departure from that plateau.

### Household operation

As with furnishings and equipment, expenditures for household operation have increased at about the same rate as have expenditures for other categories of consumption taken as a whole, with the result that in 1955 this category was taking the same proportion of the family budget as in 1941. Here price changes have been markedly less than in other fields of consumption; in fact the AMS index records less change in this category than in any other. Consequently consumption of the goods and services entering into household operation can be presumed to have increased more than has total consumption.

One of the outstanding consumption gains in this field is in the use of electricity. I have already mentioned that 92 percent of farm homes were on electric power lines in 1955; in 1941 the proportion was only 48 percent. Not only are more farm homes on electric lines now, but each household uses more current. In 1955 the family's share of the year's bill on farms that had electricity was \$81; in 1941 it was \$39; and, as the ads point out, electricity is one of the few things that costs less today than formerly. Obviously, the average farm family is using much more power and light than it did 15 years ago.

Another increase in expenditures in this category that also spells a gain in convenience for the household is for gas. In 1955, 35 percent of the farm families reported expenditures for bottled gas and 6 percent reported piped gas, while in 1941 the combined count was only 8 percent. I don't need to tell you that the reign of the coal or wood range in the farm kitchen is over.

There have been changes in heating the farm house, too. The proportion buying wood has decreased by half and there appears to have been some decrease in the proportion buying coal. Kerosene, which used to be bought by almost three-fourths of all farm families, is now reported by less than a third. This, of course, reflects changes in cooking and lighting as well as in heating methods. Users of fuel oil, on the other hand, have increased; a fifth of all families reported this expenditure in 1955.

25

All of this adds up to a considerable upgrading of the mechanics of housekeeping. But not all the convenience expenditures, the items that can be taken to indicate a high level of living, show an increase from 1941 to 1955. The notable exception is that fewer families had household help, and in spite of the well-recognized rise in the hourly cost of such help, expenditures here have dropped. This, of course, is a national phenomenon.

Expenditures for supplies--the soaps and cleaning material, paper supplies, postage and stationery, and all the miscellanea necessary for running the house--increased even more than the other components of household operations in the period 1941-1955.

#### Work done on the family dwelling

I next should discuss what we are calling in this presentation "dwelling upkeep." This includes repairs and replacements on the house paid for by the family and, when the family lives in an off-farm dwelling, rent or the expenses connected with ownership--taxes, insurance, and mortgage interest. It also takes in expenditures for vacation dwellings and for lodging away from home.

Of these items, repairs and replacements to the house are by far the most important, accounting in 1955 for 70 percent of the total expense for dwelling upkeep. I propose to limit my discussion of this category to this item, and at the same time to combine with these expenditures outlays for improvements that we normally consider savings rather than consumption expenditures. In other words, I will be talking about all the work done on the family home for which the family, rather than a landlord, paid.

Such work in 1955 amounted to \$125 per family (table 4). This is more than four times the expenditure in 1941. There has been considerable price increase in this category, more than in the other two categories I have discussed, but even so, 1955 expenditures are almost double those of 1941 when expressed in dollars of constant purchasing power.

Another way to compare the two periods is to consider the proportions of families having expenditures for such work. This comparison cannot be made in precise terms, since the tabulations of the 1955 data do not include a count of the families doing any work and the counts of those doing each of the various kinds cannot be added since many families reported more than one kind. However, I think you can get a dramatic indication of the difference when I say that in 1955 the proportion of families reporting expenditures for interior painting alone was about the same as the proportion reporting all kinds of work in 1941.

I think that you will be interested in what kinds of work families were doing on their housing in 1955 even though I cannot provide a comparison with an earlier period. The work most frequently reported was of types that would usually fall under the heading of renovation although undoubtedly some of it was in conjunction with remodelling or building additions--painting, both interior and exterior, and papering. Interior



painting was reported by 28 percent of the families, exterior painting and papering by about half as many. Plumbing installation or repair and the installation or repair of awnings, screens, or storm windows were each made by 10 percent of the families. All other types of work were reported by fewer than 10 percent.

### Factors affecting expenditures for the housing categories

I would like to turn now to an overall consideration of the housing categories and particularly to factors that affect expenditures for them.

You have seen the chart showing the effect of position in the family life cycle on spending. The age of the operator, which we are using as the indication of position in the family life cycle, affects the various housing components differently so that no clear-cut pattern emerges for housing as a whole (table 5). The variation shown in furnishings and equipment, is however, clear-cut and quite striking. Both dollars spent on furnishings and equipment and the percentage of total consumption expenditures used for this category decrease with age. Obviously young families are building up their stocks of household goods and need to put relatively more of their resources into this category in the early years. The opposite trend--increasing importance with age--shows up for dwelling upkeep. Here this results partly from changes in spending in this category and partly from changes in other categories. Families in the middle and later ranges of the family life cycle spend more for dwelling upkeep than do younger families, but older families spend about the same amounts as those in the middle range and the continued rise in importance of this category is due to decreased spending for other categories by the older group. There is no clear-cut pattern in the proportion of total spending used for household operation. Spending is about the same among younger and middle-aged families, but the proportion this category takes of total spending decreases as middle-aged families increase their spending in other categories. Older families spend considerably less for household operation but they have also made even sharper decreases in other categories so they show a gain in the proportion of the total spent for household operation.

An increase in family size is accompanied by some increase in expenditures for household operation and a somewhat sharper increase in expenditures for furnishings and equipment. There are also increases elsewhere in the budget, however, and as a result household operation decreases in importance with increase in family size and there is only a slight rise in the importance of furnishings and equipment. Spending for dwelling upkeep decreases sharply between the two-person family and larger families, and the importance of the category decreases correspondingly.

Miss Brew has shown that education has the effect of raising the family's standard of living. Families in which the operator has completed 9 or more years schooling spent more than families whose heads had less than 9 years in school. Household operation expenditures were increased proportionately more than total spending, but the relative position of the other housing categories was not changed appreciably.

25



### Farm-urban differences

You will hear much evidence today and tomorrow that farm people are living more like urban people and the chart shown earlier by Miss Brew bears out that they are spending more like urban people. This chart shows that in the housing categories as a group there were and still are considerable differences and this will probably always be true. In 1955, farm expenditures per person for housing were only 36 percent of urban (table 6). Part of these differences are a matter of accounting. Traditionally rent, real estate taxes, and mortgage interest payments are assigned to the housing category for urban families, while in this presentation as in the past they have been assigned to the farm for farm families. These accounting differences are not enough, however, to account for the relatively low position of the housing categories. When a share of farm real estate taxes, mortgage interest, financing costs, and insurance are assigned to the owned farm dwelling, farm housing expenditures per person are only increased to 41 percent of the urban level. If it were possible to apportion part of the farm rental to the farm dwellings, this figure would be moved only a few percentage points higher.

That this comparison is made on a per-person basis depresses the farm position unduly since family size has less effect on expenditures for the housing categories than on the budget as a whole. If the comparison had been made on the basis of expenditures per family, there would be somewhat less difference between the farm and urban levels.

We must recognize, however, that the greatest differences between the levels of living of farm and urban families are probably in the area of housing.

Expenditures for furnishings and equipment show up better in a farm-urban comparison than do either the housing categories as a whole or even total consumption expenditures. This can be attributed to the fact that farm families are still in the process of building up inventories to a greater extent than are urban families.

Table 1.--Expenditures of farm-operator families for total consumption and for the housing categories, 1941 and 1955

Item	1941		1955			
	In 1941 dollars	In 1955 dollars	United States	North Central	South	West
		<u>1/</u>				
Total consumption expenditures....	\$817	\$1,716	\$2,759	\$2,797	\$2,463	\$3,795
Dwelling upkeep <u>2/</u> ..	15	35	71	64	59	143
Household operation.	87	140	289	333	221	399
Fuel, light, re- frigeration and water.....	55	--	177	239	126	228
Other household op- eration.....	32	--	112	94	95	171
Furnishings and equipment.....	66	132	219	228	199	297
Household textiles	9	--	25	24	23	35
Furniture.....	11	--	53	58	47	67
Floor coverings...	6	--	16	21	11	32
Kitchen, cleaning and laundry equipment.....	31	--	84	79	83	108
Major items.....	--	--	58	49	63	66
Other items.....	--	--	26	30	20	42
Miscellaneous housefurnishings	9	--	41	46	35	55

Note: Data from both surveys adjusted for comparability.

1/ Adjusted by the AMS Index of Prices Paid by Farmers for Family Living Items.

2/ Includes expenditures for repairs and replacements, rent and taxes, mortgage interest, and insurance on off-farm dwellings, and expenditures for lodging away from home. Excludes rent, taxes, mortgage interest, and insurance on the farm dwelling.

Sources: U. S. Department of Agriculture Misc. Pub. 520, Rural Family Spending and Saving in Wartime, June 1943; unpublished data from U. S. Department of Agriculture and U. S. Bureau of the Census, Survey of Farmers' Expenditures in 1955.

Table 2.--Position of the housing categories in the budget of farm-operator families, 1941 and 1955

Item	1941		1955
	In 1941 dollars	In 1955 dollars <u>1/</u>	
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
Total consumption expenditures .....	100.0	100.0	100.0
Furnishings and equipment .....	8.1	7.7	7.9
Household operation .....	10.6	8.2	10.5
Dwelling upkeep <u>2/</u> .....	1.8	2.0	2.6

Note: Data from both surveys adjusted for comparability.

1/ Adjusted by the AMS Index of Prices Paid by Farmers for Family Living Items.

2/ Includes expenditures for repairs and replacements, rent and taxes, mortgage interest, and insurance on off-farm dwellings, and expenditures for lodging away from home. Excludes rent, taxes, mortgage interest, and insurance on the farm dwelling.

Sources: U.S. Department of Agriculture Misc. Pub. 520, Rural Family Spending and Saving in Wartime, June 1943; unpublished data from U.S. Department of Agriculture and U.S. Bureau of the Census, Survey of Farmers' Expenditures in 1955.



Table 3.--Distribution of expenditures of farm-operator families  
for furnishings and equipment, 1941 and 1955

Item	1941	1955		
		United States	North Central	South
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
Total furnishings and equipment.....	100	100	100	100
Kitchen, cleaning and laundry equipment.....	47	38	34	42
Major items.....	--	26	21	32
Other items.....	--	12	13	10
Furniture.....	17	24	25	24
Flour coverings.....	9	7	9	6
Household textiles.....	14	11	11	12
Miscellaneous.....	14	19	20	18

NOTE: Data from both surveys adjusted for comparability.

Sources: U. S. Department of Agriculture Misc. Publ. 520, Rural Family Spending and Saving in Wartime, June 1943; unpublished data from U. S. Department of Agriculture and U. S. Bureau of the Census, Survey of Farmers' Expenditures in 1955.

229

Table 4.--Work done on farm-operator dwellings, 1941 and 1955

Type of outlay	1941		1955
	In 1941 dollars	In 1955 dollars <u>1/</u>	
All.....	\$29	\$68	\$125
Repairs and replacements.....	11	26	50
Improvements (alterations and additions)....	18	42	75

Note: 1955 data adjusted for comparability with the earlier survey.

1/ Adjusted by the AMS Index of Prices Paid by Farmers for Family Living Items.

Sources: U.S. Department of Agriculture Misc. Pub. 520, Rural Family Spending and Savings in Wartime, June 1943; unpublished data from U.S. Department of Agriculture and U.S. Bureau of the Census, Survey of Farmers Expenditures in 1955.

Table 5.--Average expenditures of farm-operator families with incomes of \$2,000 to \$4,000 for total consumption and for the housing categories, by selected characteristics, 1955

Family characteristic	Total consumption	Dwelling upkeep <sup>1/</sup>	Household operation	Furniture and equipment
Size:				
2 persons.....	\$2,350	\$110	\$295	\$180
4 persons.....	3,150	45	330	265
6 persons.....	3,340	45	320	285
Age of operator:				
Under 35.....	2,870	10	310	290
45-54.....	3,280	65	315	240
65 and over.....	2,140	65	285	125
Schooling of operator:				
Under 9 years.....	2,730	45	270	220
9 years and over.....	3,220	70	365	270

NOTE: Data adjusted for comparability with earlier surveys.

<sup>1/</sup> Includes expenditures for repairs and replacements, rent and taxes, mortgage interest, and insurance on off-farm dwellings, and expenditures for lodging away from home. Excludes rent, taxes, mortgage interest, and insurance on the farm dwelling.

Source: Unpublished data from U. S. Department of Agriculture and U. S. Bureau of the Census, Survey of Farmers' Expenditures in 1955.



Table 6.--Average expenditures per person of farm-operator and urban families for major categories of consumption in the United States, 1941 and 1955

Category of expenditures	Expenditures per person				Farm as a per-	
	1941		1955		cent of urban	
	Farm	Urban	Farm	Urban <u>1/</u>	1941	1955
Total consumption...	\$204	\$678	\$726	\$1,525	30	48
Housing <u>2/</u> .....	42	197	153	422	21	36
Furnishings and equipment.....	16	35	58	89	46	65

NOTE: Data adjusted for comparability between surveys.

1/ Derived by adjusting the 1950 urban expenditures in proportion to changes shown in the Commerce series on personal consumption expenditures.

2/ For urban, includes repairs, rent, real estate taxes, mortgage interest payments, financing charges, expenditures on vacation homes and lodging away from home; household operation; and furnishings and equipment. For farm, data are the same except that rent, real estate taxes, mortgage interest payments and financing charges on the farm dwelling are excluded.

Sources: U. S. Department of Agriculture, Misc. Publ. 520, Rural Family Spending and Saving in Wartime, 1943; U. S. Department of Labor, Bulletin 822, Family Spending and Saving in Wartime, 1945; unpublished data from U. S. Department of Agriculture and U. S. Bureau of the Census, Survey of Farmers' Expenditures in 1955; Wharton School of Finance and Commerce, University of Pennsylvania, Study of Consumer Expenditures, Incomes and Savings, Vol. XVIII, Summary of Family Incomes, Expenditures and Savings, 1950, 1957; Survey of Current Business, Personal Consumption Expenditures by Type of Product, U. S. Department of Commerce, 1954 Supplement and July 1957.

UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Research Service  
Institute of Home Economics

CHANGES IN FAMILY SPENDING--MEDICAL CARE

Jean L. Pennock, Home Economist

In 1955 farm-operator families spent, on the average, \$240 per family or \$63 per person for medical care. Comparable figures for 1941, the pre-war year for which we also have data from a national sample of farm operators, are \$60 per family and \$15 per person (table 1). In terms of percentage gains in family spending over the interval, increases in medical care expenditures are among the largest to be reported here.

In looking for an explanation for this increase, here as with all the other fields we have considered, we turn to the change in the prices of goods and services. When this is taken into account, in this instance by adjusting by the medical care components of the BLS Consumer Price Index since the AMS Index of Prices Paid by Farmers does not cover medical care, we still have an increase proportionately greater than that shown for all consumption.

When we look at how this money is being spent, and how it was spent in 1941, we are immediately faced with the fact that a major change has taken place in the method of paying for medical care. In 1941, almost all farm families expected to make direct payment for such care as they received it. In 1955, half the farm families were prepaying some part of their medical care. That is, they either belonged to prepayment plans or carried health insurance. This fact in itself probably explains part of the increase in medical care expenditures. Larger expenditures can be made without undue strain to the family budget when they are portioned out in regular payments over time. The effects of prepayment on the level of total expenditures cannot be shown from the data collected in this survey, but other studies have shown, for example, that those with hospitalization insurance use hospitals to a greater extent than those without this kind of insurance.

As a result of the increasing use of prepayment, almost a fifth of the family's medical dollar--18 cents to be exact--went for insurance and the rest was used for services as incurred. In 1941, only 5 cents on the dollar went into insurance.

All through these programs we have been looking at what farm families are getting for their expenditures and there is every reason to do the same with medical care. Here, however, the very fact that families are prepaying part of their medical bills complicates the picture. We have in

effect two accounts, and except that the prepaid account also furnishes an unmeasurable quantity of that intangible, security against the unpredictable bill for accident or illness, they both provide the same kinds of goods and services but in different proportions. Ideally we would like to know for each family what they got from the insurance account in the same detail as we know what they got from the direct expenditure account, but this is impossible in a general expenditure survey. To be able to discuss the goods and services received without regard to the method of payment, I am assuming that what was paid into the insurance account was received in goods and services by the families in approximately the same proportion that the insuring organizations paid out money to hospitals and doctors who provided the service. I have assigned two-thirds of the total insurance payments to hospital care and one-third to physicians' care. In 1941, however, an even larger proportion would have been used for hospital care since at that time prepayment plans were almost entirely confined to hospitalization.

The thing that stands out when we look at money expenditures in the two periods is the tremendous increase in the importance of hospital care. Through insurance and in direct payments, expenditures for hospital care in 1955 were about 7 times what they were in 1941. By no means all of this increase can be attributed to the effects of insurance; direct payments were 5 times as high as in 1941. In comparison, large as was the increase in total spending for medical care over this period, it only quadrupled. Of the other components of total medical care, only medicines and drugs increased at a rate comparable to the total; all other components, while making gains dollarwise; increased relatively less than the total.

The picture is different when we look at quantities of goods and services consumed since prices of the various types of medical services and goods did not change equally over the period 1941-1955. As measured by the Consumer Price Index of the BLS, the cost of services increased more than the cost of goods, and the greatest price increase was shown in hospital rates. If we make allowance for changes in the price level, we find that farmers were buying twice as much medical care in 1955 as in 1941. Expenditures for medicines and drugs, in dollars of constant purchasing power, had tripled. Expenditures for medical services, in dollars of constant purchasing power, had in all cases about doubled.

In terms of the distribution of the medical care dollar, as a result of price changes and differences in the volume of services consumed, hospital care in 1955 was taking 27 cents as compared with approximately 15 cents in 1941. Physicians' services, traditionally the largest item in the medical budget, still took a larger proportion of the medical dollar than hospital care but it had lost ground. In 1941 it accounted for 38 cents out of every dollar, but in 1955 only 33. Medicines and drugs remained stationary, taking 17 cents of each dollar. The other components of medical care lost ground. In 1955 dental care took 12 cents and eye tests and glasses 6 cents.



## Factors affecting spending for medical care

Let us turn from this comparison of spending over time to an examination of some of the factors that make spending what it is. First a brief word about income. In general, expenditures for medical care increase with income and are approximately the same proportion of total consumption expenditures at all income levels.

The chart you have seen on the relationship between family size and consumption expenditures indicates that family expenditures for medical care increase with the increase in family size throughout the moderate-size families but are lower in the 6-person than in the 4-person family. (table 2). This pattern is the result of regional differences. In the North Central region expenditures increase with size of family throughout the entire range, while in the South they rose only until the 3-person family was reached and dropped thereafter. In both regions and for the farm population as a whole, there was a sharp increase in per-person expenditures between the single individual and the 2-person family; thereafter per-person expenditures decreased with increase in family size. Miss Brew mentioned what is probably the most important cause of this--the difference in the age composition of families of various sizes and the increase in expenditure with the age of the individual. The 2-person family has a higher proportion of adults than the 6-person family and therefore a higher average expenditure per person. As family size increases, total expenditures for consumption increase more sharply than medical care expenditures, with the result that medical care takes a decreasing proportion of the family budget.

You also saw a chart yesterday on the effect of position in the family life cycle on consumption expenditures. Medical care expenditures rise as the young family becomes middle-aged and then fall as the family ages further. The changes between the early years and the middle span are in line with other changes in family consumption and in these two periods medical care takes the same proportion of the family dollar. Among older families, however, the decrease in medical care expenditures is not as sharp as the decrease in spending for other categories of family living; consequently medical care takes a larger proportion of total consumption expenditures in this group than among the younger families.

You have also seen a chart showing the effect of the amount of schooling on consumption expenditures. As you might expect, medical care is one of the items that varies most with level of education. As the level of education rises, medical care takes an increasing proportion of the family budget.

## Regional differences

The effects of income, family size, level of education, and other characteristics that we have not gone into in these presentations produce regional differences in expenditures. In dollars spent per family for medical care, the West far exceeds the other regions; the North Central is about the same as the U.S. average, and the South is somewhat lower. The respective figures are \$333, \$241, and \$222 (table 3).

263

The general pattern of expenditures among the regions is similar. Such differences as exist, in line with the difference in level of expenditure, indicate a higher level of care in the West and a lower level in the South. The proportion of expenditures, both direct and by way of insurance, used for physicians' services and hospital care is fairly similar. Eye care also takes the same proportion of the total in each region. The outstanding differences are in expenditures for dental care and for medicines. The West spends a considerably larger proportion of the total on dental care--15 percent as compared with 12 percent in the North Central region and 9 percent in the South. This difference between the West and the South also shows up in the proportion of families having expenditures for dental care. In the West 62 percent of the families reported these expenditures, in the South only 46 percent. The South spends a larger proportion of its medical dollar on medicines than the other regions. Indeed, the South, although spending less in total for medical care than the North Central, spends a larger amount for medicines. The average expenditure in the South--\$46 per family--is 21 percent of the total cost of medical care there, as compared with the North Central average of \$37 which is only 15 percent of its total.

In view of the relatively low expenditures for medical care made by families in the South, it is encouraging to be able to report that in recent years there have been greater changes in the South than in the North Central region. In 1945, the other year for which we can make a regional comparisons, the level of spending for medical care in the South was only 70 percent of that of the North Central region. By 1955 it has risen to 92 percent. This can be attributed in good part to a greater increase in the level of income in the South and to a more than proportionate loss from the population of those groups whose levels of expenditure are lowest--sharecroppers, other tenants, and nonwhite operators.

In this connection I should like to comment on two other factors that appear to be associated with the level of spending for medical care and that might have been mentioned above except that they have particular significance by region. The first of these is tenure. When medical care expenditures are classified by tenure, distinct regional patterns appear. In the North Central region, tenants spent more than owners of comparable income. In the South, however, owners spent more than cash and share tenants at the same income level, and the latter in turn spent more than sharecroppers. The pattern in the North Central region seems to represent a break with the past. It may be related to the higher educational attainment of tenants in this region--they tend to be considerably younger than owners and therefore to have progressed further before they left school. It probably also reflects the increasing difficulty in moving from tenant to owner status. As the capital needs for ownership increase and tenants find it impossible to accumulate the needed amount by saving, there is less incentive to save and consequently less pressure on the level of living. In the South, it must be recognized that the pattern by tenure is strongly influenced by the pattern by color. The proportion of nonwhite operators is largest among sharecroppers and smallest among owners. The level of educational attainment by tenure is also the reverse of the pattern found in the North Central region; the higher position on the tenure ladder, the higher the educational attainment of the group.



This brings us to differences in spending for medical care between white and nonwhite families. In the South, where a fifth of farm-operator families in 1955 were nonwhite, expenditures of nonwhite families were lower than those of white families of similar income levels. In addition the nonwhite families tend to fall at the lower end of the income scale. Differences in spending for medical care were sharper than differences in total consumption expenditures. These differences by color may result in part from differences in facilities available to the two groups. They also reflect differences in the level of education and differences in family size.

#### Farm-urban comparison

I began by saying how much farm spending for medical care has improved in comparison with the past. I would like to close by pointing out how much it has improved in relationship to urban spending. This is not to say that expenditures of farm families for medical care are on the same level as those of urban families. In 1955 they appeared to be spending only about three-fourths as much per person as urban families. But in 1941 the picture was very different. Then they were spending less than half as much per person as urban families. In percentage points there has been a greater gain here than in any other consumption category. And in 1955 this category was closer to the urban level than any other.

301-



Table 1.--Average expenditures of farm-operator families for medical care, 1941 and 1955

Item	1941		1955
	In 1941 dollars	In 1955 dollars <u>1/</u>	
Total medical care <u>2/</u> .....	\$60	\$115	\$235
Health insurance and prepayment plans .....	3	9	42
Direct expenditures .....	57	104	193
Physicians' services <u>3/</u> .....	22	36	63
Dental care <u>3/</u> .....	9	16	29
Eye tests and glasses <u>3/</u> .....	5	6	13
Hospital care <u>3/</u> .....	7	23	36
Medicines and drugs <u>2/</u> , <u>3/</u> ..	10	13	39
Other <u>3/</u> , <u>4/</u> .....	5	11	13

1/ Adjusted by components of the Consumer Price Index. Total by addition.

2/ In this table vitamin and mineral preparations are excluded from medicines and drugs in the 1955 data to achieve comparability with 1941.

3/ For comparability in presentation unitemized expenditures reported in 1955 have been assigned to these items in proportion to the itemized expenditures.

4/ Includes nursing care, other practitioners' services (osteopaths, naturopaths, chiropractors, faith healers, midwives), laboratory tests and x-rays, medical appliances and supplies, and ambulance.

Sources: U. S. Department of Agriculture, Misc. Pub. 520, Rural Family Spending and Saving in Wartime, 1943; unpublished data from U. S. Department of Agriculture and U. S. Bureau of the Census, Survey of Farmers' Expenditures in 1955.

Table 2.--Average expenditures of farm-operator families with incomes of \$2,000 to \$4,000 for total consumption and medical care by selected characteristics, 1955.

Family characteristic	Total consumption	Medical care
Size:		
2 persons .....	\$2,350	\$225
4 persons .....	3,150	270
6 persons .....	3,340	250
Age of operator:		
Under 35 .....	2,870	230
45-54 .....	3,280	270
65 and over .....	2,140	220
Schooling of operator:		
Under 9 years .....	2,730	220
9 years and over .....	3,220	300

Note: Data adjusted for comparability with earlier studies.

Source: Unpublished data from U. S. Department of Agriculture and U. S. Bureau of the Census, Survey of Farmers' Expenditures in 1955.

207

Table 3.--Average expenditures of farm-operator families for medical care, by region, 1955

Item	Average expenditures				Percent of families having expenditures			
	U.S.	North Central	South	West	U.S.	North Central	South	West
	Dollars	Dollars	(Dollars)	Dollars	(Percent)	(Percent)	(Percent)	(Percent)
All medical care <u>1/</u> .....	240	241	222	333	2/	2/	2/	2/
Health insurance, prepayment plans...	42	48	34	52	51	56	45	52
Direct expenditures.....	198	193	188	281	2/	2/	2/	2/
Hospital care.....	31	27	32	44	21	23	20	26
Surgeons' services.....	11	11	7	28	9	10	7	15
Other M.D.s' services.....	49	50	47	56	74	74	73	70
Osteopaths' services.....	3	5	1	4	6	11	2	11
Other practitioners' services.....	3	4	2	5	8	12	4	12
Dental care.....	28	30	20	50	54	62	46	62
Eye tests and glasses.....	12	13	10	18	34	39	29	41
Nursing care.....	2	1	2	4	2	1	2	2
Laboratory tests and x-rays.....	3	3	2	6	12	14	9	20
Medicine and drugs <u>1/</u> .....	43	37	46	57	2/	2/	2/	2/
Medical appliances and supplies.....	2	1	1	3	13	14	10	15
Other and unitemized.....	13	11	16	8	2/	2/	2/	2/

1/ Includes vitamin and mineral preparations.2/ Not available.

Source: Unpublished data of the U.S. Department of Agriculture and U.S. Bureau of the Census from Survey of Farmers' Expenditures in 1955.



UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Research Service  
Institute of Home Economics

CHANGES IN FAMILY SPENDING--THE OVERALL PICTURE

By Margaret L. Brew, Head, Household Management Section

You who work with families continuously, giving advice on the management of family finances, need to know what changes have been taking place in family spending, how spending differs in the various parts of the United States, and how it differs among families of different size and composition. Information about family expenditures is also a useful tool in assessing how well families are living. We know, for example, that families that spend more for food are likely to have better diets than those who spend less. Families that spend more for clothing usually have more clothing on hand.

Last year, we had, for the first time in many years, a large-scale study of the expenditures of farm-operator families. Nearly 4,000 families living in all parts of the United States reported on their expenditures for the year 1955. In 1955, there was a large-scale survey providing information on family food consumption in a spring week; this study included urban and rural nonfarm families as well as farm-operator families. Earlier, the Bureau of Labor Statistics made a survey of urban family living expenditures in 1950. These three surveys provide the opportunity to review the nature of family spending in recent years.

Earlier surveys furnish the basis for a comparison of changes over time. A national survey of family expenditures in 1941 and family food consumption in a spring week of 1942, give us data for urban, farm and rural nonfarm families just prior to and in the early stages of World War II. Surveys covering smaller segments of the population in interim years, supplement the analysis of changes over time.

In 1955, farm-operator families were spending well over three times what they were in 1941 for current consumption, and farm families were slightly smaller. The amount and quality of goods that families bought had not increased proportionately, for price increases during the period reduced the purchasing power of the dollar. In 1955 dollars, farm family spending was about two-thirds greater in 1955 than in 1941. (See table 1 1/)

---

1/ Charts showing the data presented in tables 1-3 and 5-7 are available in U. S. Department of Agriculture "1958 Agricultural Outlook Charts," Nov. 1957.

Presented at the 35th Annual National Agricultural Outlook Conference, November 20, 1957, Washington 25, D. C.

27a

In the period between 1941 and 1955, farm families increased their spending proportionately more than urban families and, consequently, farm spending is now closer to urban spending than in the earlier period. The comparisons are necessarily approximate because there was no parallel survey of urban family living in 1955. When we adjust the figures from the study of urban family spending in 1950 to the year 1955, using the U. S. Department of Commerce data for aggregate consumer expenditures in the United States, we estimate that farm families spent about half as much as urban families for family living in 1955, whereas in 1941 they had spent only 30 percent as much. Because farm families usually have a considerable amount of home-produced food and usually pay no separate rent for the farm dwelling, their levels of living are closer to the levels of living of urban families than these figures indicate. In expenditures for medical care, for example, farm families in 1955 spent about three-fourths as much as urban families, for clothing and personal care they spent about two-thirds as much. (See table 2.)

Southern farm families have made greater gains in levels of living in the post World War II period than the families living in the North Central region, so the two regions are now closer together than they were a decade ago. In 1945 southern farm families were spending 69 percent as much as North Central farm operator families, whereas in 1955 they were spending 84 percent as much. Southern farm families in 1955 were very close to North Central families in their spending for clothing and personal care, in transportation, in medical care, and in food. They were spending about three-fourths as much for dwelling upkeep, household operation and house furnishings and equipment. They were spending about two-thirds as much for recreation, education, and reading. (See table 3)

Comparing the various regions of the United States as to level of expenditures in 1955, the Pacific States stand at the top of the eight regions as used in the 1955 study. The averages for families in the Mountain States, in the Northeast, and the East North Central States each were above the average for all families in the United States. The average for the West South Central States about equalled that for the United States as a whole. The averages for the West North Central, the South Atlantic, and the East South Central States were below the United States average. (See table 4.)

Part of the differences in family spending by region are due to climate. It costs more, for example, to heat a house in the northern part of the United States than in the southern States. But there are differences other than climate among the regions that account for differences in family spending. Undoubtedly the most important is income. Family expenditures by region show a very close relationship with income by region. Other differences in family characteristics that must be taken into account in comparing differences in spending by region are family size, education, age, and off-farm employment. These are but a few of the multiplicity of factors that contribute to differences in family spending and seldom, if ever, are they all operating in the same direction.



It is not possible here to examine the many different family characteristics that seem to be associated with family spending. A few will demonstrate the types that can be found. Those of you who work with families are familiar with the relationships between family size and spending. Families of larger size, even with the same income, spend more, overall, for current consumption than do smaller families. For major groupings, the differences in spending are greatest for food and for clothing (including personal care). However, note that though families of 6 persons spend more for food and for clothing than do two-person families, they do not spend three times as much. Differences in housing, in transportation, and in medical care are relatively small. There are associated family characteristics here that must be taken into account. Two-person families, for example, include older couples who as individuals are likely to require more medical care than families with young children. (See table 5.)

Younger families and older families spend less, on the whole, than do families whose heads are in the 40's and 50's. Again, the separate consumption categories that seem to differ most are food and clothing. Family size enters in here, too, for families whose heads are in the neighborhood of 50 are usually of a larger size than young farm operators or those past 60. (See table 6.)

When we classify families with the same income by number of years of schooling of the family head, we find the greatest differences in spending, dollar-wise, to be in housing. However, percentage-wise, the differences are greater for medical care and the miscellaneous category which includes recreation and education. Some regional differences are entering in here but they affect the relationship only a little. More families with heads whose level of education is lower live in the South where housing costs are less due to climate. Thus the difference in spending for the housing category shown here is exaggerated somewhat. Probably a more important contributing factor is the differences in ages of the two groups. A far larger proportion of heads with less than 9 years of schooling are in the higher age brackets, when family spending tends to be low. (See table 7.)

Another way of examining family spending is to look at the distribution of total expenditures among the various consumption categories. By distribution of expenditures I mean the percentage of each dollar spent that goes for food, clothing, housing, medical care, and other consumption categories. This is sometimes referred to as the pattern of spending. This method of analysis permits us to examine more easily the relationships of the various parts to each other and to the whole as the whole changes.

When we analyze family spending patterns at any one point in time we find that if total family expenditures for family living are low, usually a large percentage of the total goes for food. Small percentages are spent for such categories as recreation and reading, for these are considered less necessary to maintain a family. However, for families with higher total expenditures, the distribution is different. Usually the percentage spent for food decreases rather rapidly as total expenditures increase. It is not that families who are spending more for family living

241



spend less for food--actually they spend more--but the amount spent for food does not increase as rapidly as the amount spent for all other goods and services, so the percentage of the total declines. On the other hand, the percentages of the total spent for transportation, for housing, for recreation and education, and for clothing usually are greater among families with higher total spending for family living. Accordingly, the amounts spent for these categories increase at an even greater rate than total expenditures for family living.

A comparison of the distribution of family expenditures at two different periods of time gives us some clues of changes in what families deem important in family living, and, using the known variation in our one-time studies as a yardstick, provide a rough measure of changes in levels of living. However, the analysis is not a simple one and many factors must be taken into account--changes in family practices, technological developments, changes in the interrelationship of prices. Between 1941 and 1955 some marked changes took place in family patterns of spending; on the other hand, some changes did not occur that one might have expected considering that total spending for current consumption increased by approximately two-thirds in dollars of constant purchasing power.

The percentage spent for food did not decline as one might have expected with the increase in total family spending, but remained exactly the same in 1955 as in 1941. Undoubtedly the decreases in the amount of food produced for home consumption, the increased expenditures for food eaten away from home, and the increased purchases of processed or semi-processed food accounts for this lack of change in the share that food gets of the total family spending dollar.

The percentage of the total spent for transportation also remained about the same in 1955 as in 1941, although we might have expected an increase with an increase in total expenditures. There are two factors that probably account for this percentage remaining much the same in the two years. In 1941, many farm families foresaw the imminence of a shortage in the automobile market, and with farm income rising, they were able and did buy cars. In fact, the percent purchasing new cars and the percent purchasing used cars in that year were about the same as in 1955. Another contributing factor is that recently farm families have been signing less of the cost of automobile and truck purchase and upkeep to family living expenses--55 percent in 1941 and only 44 percent in 1955.

The percentage spent for clothing and personal care actually declined between 1941 and 1955, from 19 percent of the total to 17. This drop in the proportion of total expenditures going for clothing is not peculiar to farm families; urban families also are spending less of their family spending dollar for apparel. And there has been much conjecture by the apparel industries as to why families are placing less importance on clothing. It can be demonstrated that a part of this decline can be attributed to changes in the age distribution of the population. Older persons and young children spend less for clothing than adults in their 20's, 30's and 40's.

The percentage spent for medical care increased rather sharply. Farm families are undoubtedly placing greater emphasis on medical care today than they did in the 40's. The program of assisting rural communities in building hospitals has probably contributed to this increase by making medical care somewhat more available.

Thus, from this distribution we can see that some fundamental changes have been taking place in the way farm families spend their money for family living. Part of this change results from improved levels of living--farm families are spending more today in dollars of constant purchasing power than they did prior to World War II. But there have also been some fundamental changes in what farm families consider important. They are placing greater emphasis on the convenience of purchased food, on the time saving that results from buying processed or semi-processed foods, or of eating in restaurants occasionally. They are giving more attention to their medical needs. And, though they are spending more for clothing and therefore are probably better dressed, their expenditures for clothing have not increased as much as their total expenditures for family living.

243

Table 1.--Expenditures of farm-operator families for major categories of consumption in the United States, 1941 and 1955

Category of expenditure	Expenditure per family	
	1941	1955
	In current dollars	
Total for current consumption.....	817	2,759
Food and beverages.....	250	846
Housing.....	168	579
Dwelling upkeep.....	15	71
Household operation.....	87	289
Housefurnishings and equipment...	66	219
Clothing and personal care.....	155	476
Clothing.....	135	407
Personal care.....	20	69
Transportation.....	109	376
Medical care.....	60	240
Recreation, reading, education.....	41	163
All other expenditures.....	34	79
	In 1955 dollars 1/	
Total for current consumption.....	1,716	2,759

NOTE: Data for both surveys adjusted for comparability.

1/ Using AMS Index of Prices Paid by Farmers for Family Living Items.

Sources: U. S. Department of Agriculture Misc. Publ. 520, Rural Family Spending and Saving in Wartime, June 1943; unpublished data from U. S. Department of Agriculture and U. S. Bureau of the Census, Survey of Farmers' Expenditures in 1955.



Table 2.--Expenditures per person of urban and farm-operator families for major categories of consumption in the United States, 1941 and 1955

Category of expenditure	Expenditure per person				Farm as a percent of urban	
	1941		1955		1941	1955
	Urban	Farm	Urban <u>1/</u>	Farm		
Total for current consumption.....	\$678	\$204	\$1,525	\$726	30	48
Food and beverages...	210	62	478	223	30	47
Housing <u>2/</u> .....	197	42	422	153	21	36
Clothing and personal care.....	96	39	188	125	41	66
Transportation.....	81	27	218	99	33	45
Medical care.....	32	15	82	63	47	77
Recreation and education <u>3/</u> .....	43	10	86	43	23	50
All other expenditures.....	19	8	52	21	42	40

NOTE: Data from the several surveys adjusted for comparability.

1/ Derived by adjusting 1950 urban expenditures in proportion to the changes shown in the Commerce series on personal consumption expenditures in the years 1950-1955 (Personal Consumption Expenditures, by Type of Product. U. S. Department of Commerce. Survey of Current Business. 1954 Supplement and July 1957).

2/ Includes dwelling upkeep, household operation, and housefurnishings and equipment.

3/ Includes reading.

Sources: Derived from U. S. Department of Labor, Bulletin No. 822, Family Spending and Saving in Wartime, April 1945; Wharton School of Finance and Commerce, Study of Consumer Expenditures, Incomes and Savings, Vol. XVIII, Summary of Family Incomes, Expenditures and Savings, 1950, University of Pennsylvania, 1957; Unpublished data from U. S. Department of Agriculture and U. S. Bureau of the Census, Survey of Farmers' Expenditures in 1955.

Table 3.--Expenditures per person of farm-operator families for major categories of consumption in the North Central region and the South, 1945 and 1955

Category of expenditure	Expenditure per person				South as a percent of North Central	
	1945		1955			
	North Central	South	North Central	South	1945	1955
Total for current consumption.....	\$349	\$242	\$756	\$632	69	84
Food and beverages.....	129	93	232	194	72	84
Housing <u>1</u> /.....	73	38	169	123	52	73
Clothing and personal care	77	62	124	119	80	96
Transportation.....	18	115	96	87	83	91
Medical care.....	28	18	65	57	64	88
Recreation and educa- tion <u>2</u> /.....	16	9	51	32	56	63
All other expenditures....	10	8	19	20	80	105

NOTE: Data for both surveys adjusted for comparability.

1/ Includes dwelling upkeep, household operation, and housefurnishings and equipment.

2/ Includes reading.

Sources: Unpublished data from U. S. Department of Agriculture Survey of Farm Family Living Expenditures, 1945; unpublished data from U. S. Department of Agriculture and U. S. Bureau of the Census Survey of Farmers' Expenditures in 1955.

Table 4.--Expenditures of farm-operator families for major categories of consumption, eight regions, 1955

Category of expenditure	Expenditure per family								Total U. S.	
	Region									
	East South Central	South Atlantic	West North Central	West South Central	East North Central	Northeast	Mountain	Pacific	Unadjusted	Adjusted <u>1/</u>
Total for current consumption <u>2/</u> .....	\$2,358	\$2,515	\$2,757	\$2,866	\$3,193	\$3,452	\$3,601	\$4,388	\$2,903	\$2,759
Food and beverages.....	691	753	791	836	932	1,042	962	1,223	846	846
Housing <u>3/</u> .....	537	542	713	610	805	912	960	1,134	699	579
Clothing and personal care	444	442	432	502	489	491	572	602	474	476
Transportation.....	299	324	305	416	419	465	436	659	376	376
Medical care.....	186	239	236	243	246	243	299	359	240	240
Recreation, education <u>4/</u> ..	114	116	181	153	198	187	247	272	165	163

$\frac{1}{1}$  Data adjusted for comparability with earlier surveys.

$\frac{2}{2}$  Includes tobacco, funerals for family members, legal and banking charges, occupational expenses, poll taxes, and personal property taxes.

$\frac{3}{3}$  Includes dwelling upkeep, household operation, and housefurnishings and equipment.

$\frac{4}{4}$  Includes reading.

Source: Unpublished data from U. S. Department of Agriculture and U. S. Bureau of the Census Survey of Farmers' Expenditures in 1955.



Table 5.--Expenditures of farm-operator families, income class \$2,000-\$3,999, for major categories of consumption in the United States, by size of family, 1955

Category of expenditure	Expenditure per family		
	Number of persons per family		
	2	4	6
Total for current consumption.....	\$2,350	\$3,150	\$3,340
Food and beverages.....	650	960	1,085
Housing <u>1</u> /.....	590	640	650
Clothing and personal care.....	320	560	610
Transportation.....	375	420	430
Medical care.....	225	270	250
Recreation and education <u>2</u> /.....	115	210	235
All other expenditures.....	75	90	80

NOTE: Adjusted for comparability with 1941 and 1945 data shown in tables 1, 2, and 3.

1/ Includes dwelling upkeep, household operation, and housefurnishings and equipment.

2/ Includes reading.

Sources: Unpublished data from U. S. Department of Agriculture and U. S. Bureau of the Census Survey of Farmers' Expenditures in 1955.

Table 6.--Expenditures of farm-operator families, income class \$2,000-\$3,999, for major categories of consumption in the United States, by age of operator, 1955

Category of expenditure	Expenditure per family		
	Age of operator		
	Under 35 years	45-54 years	65 years and over
Total for current consumption	\$2,870	\$3,280	\$2,140
Food and beverages.....	875	1,010	655
Housing <u>1</u> /.....	610	620	475
Clothing and personal care.....	465	605	305
Transportation.....	415	470	345
Medical care.....	230	270	220
Recreation and education <u>2</u> /.....	185	230	80
All other expenditures.....	90	75	60

NOTE: Adjusted for comparability with 1941 and 1945 data shown in tables 1, 2, and 3.

1/ Includes dwelling upkeep, household operation, and housefurnishings and equipment.

2/ Includes reading.

Source: Unpublished data from U. S. Department of Agriculture and U. S. Bureau of the Census Survey of Farmers' Expenditures in 1955.

Table 7.--Expenditures of farm-operator families, income class \$2,000-\$3,999, for major categories of consumption in the United States, by education of operator, 1955

Category of expenditure	Expenditure per family	
	Education of operator	
	Less than 9 years	9 years and over
Total for current consumption.....	\$2,730	\$3,220
Food and beverages.....	870	945
Housing <u>1</u> /.....	530	705
Clothing and personal care.....	475	550
Transportation.....	415	410
Medical care.....	220	300
Recreation and education <u>2</u> /.....	145	225
All other expenditures.....	75	85

NOTE: Adjusted for comparability with 1941 and 1945 data shown in tables 1, 2, and 3.

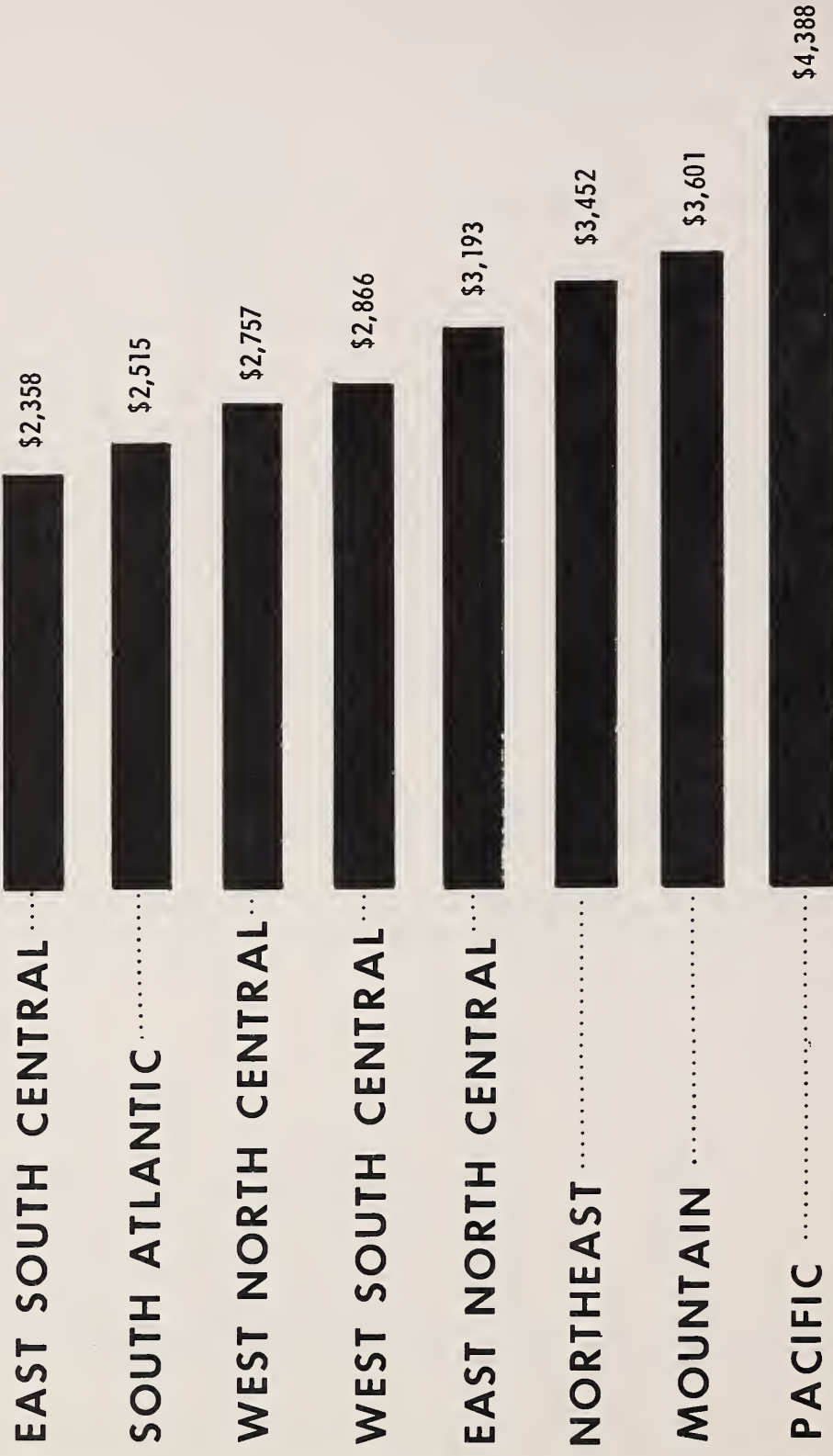
1/ Includes dwelling upkeep, household operation, and house-furnishings and equipment.

2/ Includes reading.

Source: Unpublished data from U. S. Department of Agriculture and U. S. Bureau of the Census Survey of Farmers' Expenditures in 1955.

# CONSUMPTION EXPENDITURES

*Farm-Operator Families By Region, 1955*





UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Research Service  
Institute of Home Economics

CHANGES IN FAMILY SPENDING--RECREATION AND READING,  
TRANSPORTATION, AND EDUCATION

By Emma G. Holmes, Home Economist

Discussing recreation, transportation, and education before we get to food and clothing, which with shelter are usually considered the essentials of living, may seem like putting the frills before the necessities. However, although recreation and education are relatively minor in terms of the proportion of the budget they represent, they are by no means unimportant to families. And transportation is not only a necessity to the farm family--it also takes a considerable chunk of what they spend for consumption.

Recreation and reading

Expenditure data from various sources show that spending for recreation and reading by families in the United States has kept pace with the generally increasing expenditures for current consumption. Among farm families it has more than kept pace--it has increased as a percentage of total spending for family living. But before we think about the details of recreational spending of farm families, let's take a look at the overall picture of expenditures for recreation and reading as a part of total U. S. spending for consumption.

Last spring we published in Rural Family Living an analysis of the Department of Commerce estimates of spending of U. S. consumers for recreation and reading. The list of goods and services covered included paid admissions; reading materials; a group of items including radio, television, musical instruments, etc.; sports equipment, toys, and related goods; dues to organizations, etc. The expenditure figures given for these were estimates based mainly on business reports collected by the Department of Commerce. They showed that spending for the listed items amounted to 5 percent of the total expenditure for consumer goods and services in 1955; approximately the same proportion as in 1940.

But patterns of spending for the various components of the recreation list had changed between 1941 and 1955. Television sets appeared on the market soon after World War II, and got an enthusiastic reception.

As more and more families became TV owners and spent more and more time enjoying their new source of entertainment, spending for movies fell abruptly, while that for the TV-radio group soared. In the 1941-1955 period, also, spending for reading materials, though it increased some dollarwise, declined as a proportion of total consumption spending. Spending for sports equipment and supplies, such as boats, golf equipment, bicycles, and durable toys became a more important part of the total, indicating an increasing interest in types of recreation in which people could take an active part.

In our farm family surveys lists of goods and services fairly similar to that in the Commerce series were used in obtaining data on expenditures for recreation and reading from farm families. This list included paid admission to movies, sports events, etc.; purchase and repair of radios, televisions, phonographs, and musical instruments; sports equipment, games, toys, and photography; reading materials; and a miscellaneous group including dues to social organizations, purchase and care of pets, allowances to children, and a few other minor items.

As I mentioned earlier, spending of farm families for this list of recreational goods and services more than kept pace with their increasing expenditures for all current consumption, for it amounted to 4 percent of the total outlay for such consumption in 1941 and 5 percent in 1955. The average family spent about \$70 in 1941 for the listed items (in 1955 dollars, adjusted by the index of prices paid by farmers) <sup>1</sup>/<sub>1</sub>. In 1955, the average expenditure was \$138, or approximately twice as much as at the earlier date. As with other goods and services, farm families in 1955 were spending more like urban families for recreation, for their outlay that year was half as large as that of urban families compared with 23 percent in 1941.

Older families are likely to spend smaller amounts for recreation and reading than younger ones. At all income levels families whose heads were 55 years of age or over spent relatively little, on the average, for this spending category. But this was partly due to the fact that fewer of these families reported any such expenditures. Less than three-fourths of the families headed by a person 65 or older reported any money spent for recreation other than reading, compared with 88 to 96 percent in all other age groups. Large families (6 or more persons) spent more than smaller ones, except in the lower income groups. At each income level, spending for recreation was higher among families whose head had 9 or more years of schooling than among those with less schooling.

The division of the farmers' recreation dollar among the various kinds of recreation was quite different in 1955 than in 1941. This change

---

<sup>1</sup>/<sub>1</sub> In this paper, the AMS index of prices paid by farmers for family living has been used to convert 1941 spending to 1955 dollars. The index for all commodities was used except for automotive travel. There the index for autos and auto supplies was applied. It is recognized that these indexes are not completely accurate as conversion factors, but we have used them because of the lack of more satisfactory measures.



is shown in the chart and in the following summary:

Percent of total recreation  
and reading expenditure

	<u>1941</u>	<u>1955</u>
Radio, TV, phonographs, other music.....	24	40
Admissions (movies, sports events, etc.)	26	11
Reading material.....	22	14
Sports equipment, toys, photography, etc.	20	17
Dues, pets, allowances, etc. ....	8	18
	<u>100</u>	<u>100</u>

Thus, admissions, reading materials, and the sports equipment group each became a smaller proportion of the total in 1955 than it had been in 1941, although the number of 1955 dollars spent for the two latter categories increased. Admissions to events other than movies, such as ball games and other sports events, gained some dollarwise (1955 dollars) while movies did not. At the same time, the radio-television group and the miscellaneous group each increased in importance as a proportion of total recreation expenditure.

Television took the lion's share--80 percent, in fact--of what was spent for the radio-TV group in 1955, and one-third of the amount that went for the entire list of goods and services we designate as recreation and reading. We should recognize the fact that 15 percent of the farm families bought television sets in 1955, and that the large expenditure made by these families raised the average for the entire group considerably. It seems likely that when the farm market for television sets nears saturation, so that expenditures are mainly for replacement of wornout sets and repairs for old ones, spending for TV will not be so large unless color TV and other improvements make people buy new models. At the time of the survey, early in 1956, 53 percent of the farm-operator families owned a television set. The Census Bureau reports the same rate of ownership for all farm families in February 1956 <sup>2/</sup>. It also estimates that by April 1957, 63 percent of all farm families had this medium of entertainment in their homes.

The substantial increase in the amount reported for the miscellaneous or "other" group, which included dues to social organizations, purchase and care of pets, prizes and favors for parties, children's allowances not reported as expenditures elsewhere, etc., was due mainly to the large average expenditure for children's allowances. Allowances did not appear as a separate item on the schedule that was used in interviewing the families in 1941, but were to be included in the general "other" item that ends each list. So it is possible that allowances were under-reported in that study. It is probably true, however, that more children

<sup>2/</sup> U. S. Department of Commerce, Bureau of the Census. Households with television sets in the United States, April 1957. Series H-121, No. 4 (October 29, 1957).

265



are receiving allowances now, and in larger amounts than in the early 1940's. The average expenditure per family for allowances in 1955 was \$12. Since only 15 percent of the families reported any allowances, the average for those reporting was much higher--about \$80.

The list of goods and services that we have just been discussing omits many that contribute to the fun and relaxation of family members. I have gone through the list of expenditures itemized in the studies and picked out some others that could very well be in this category, or on the borderline, at least. They are listed below, together with average expenditures reported for them:

	Expenditure per farm- operator family (1955 dollars)	
	<u>1941</u>	<u>1955</u>
Food while traveling.....	5.45	7.90
Other meals eaten away from home.....	5.80	8.75
Snacks, soft drinks, etc., away from home.....	10.05	35.95
Vacation home or house trailer.....	.20	1.80
Lodging while traveling or on vacation	3.30	5.85
Clothing for sportswear.....	.75	2.20
Boats, outboard motors.....	<u>1/</u>	2.75
Bicycles.....	1.30	2.00
Bus, train, airplane, and boat fare...	11.65	7.15
Tobacco.....	35.70	49.65
Alcoholic beverages.....	<u>1/</u>	15.20

1/ Not available.

The total of the 1955 column for these extras is \$139.20, or as much as the total for the list labeled recreation and reading. The trouble is that some of the \$139 is probably not chargeable to recreation--for instance, meals eaten out may or may not be. Another big item we haven't included is the cost of pleasure riding in the family automobile. Undoubtedly this would be a sizable amount, but again we have no way of knowing what part of the total cost of the family share of car ownership and operation should be allocated to riding for recreation, and what part to other family uses. But taking all these additional items together, we can be sure that what farm families spend "for fun" is actually considerably more than the amount reported for the items formally labeled as recreation.

### Transportation

Anyone who owns an automobile knows that it represents a major item of expenditure. For our farm-operator families, transportation--which means mainly automobile travel--took about as large a proportion of total family living expenditures in 1955 as did clothing. As you saw on the

charts shown earlier in this program, transportation took an average of 13 percent of total family consumption expenditures, both in 1941 and 1955. But this is an average, and many families spent a larger proportion than this while others spent less or none at all. In 1955, for example, the proportion of the total consumption outlay that was spent for family use of car or truck averaged about 10 percent in the under \$2,000 income group as a whole, and 17 percent in the \$5,000 to \$7,500 income group. However, if we take into account the fact that less than four-fifths (78 percent) of the families in the under \$2,000 group reported any expenditures for car or truck, we find the average for those who did have such expenditures amounted to 12 percent of what they spent for living.

Most farm families today consider some means of automotive travel a necessity. In 1955, 87 percent of U. S. farm operators owned a car or truck used for family transportation, compared with 69 percent in 1941. Thirteen percent used a truck only, having no automobile. Seventy-four percent owned an automobile. This was about the same rate of automobile ownership as among U. S. families as a whole. Almost 1 in 10 farm operators owned not just 1 but 2 or more cars, according to a survey made by the Federal Reserve Board 3/.

The families that had a truck as their only owned means of automotive transportation were concentrated pretty much in the lower income groups, and the lower income groups had a large number of older families. Almost one-fifth of the families reporting incomes under \$2,000, and one-sixth of those headed by a person 55 years of age or over used a truck for family travel, but no car (table 1). On the other hand, only 1 percent of the families with income of \$7,500 or more, and 8 percent of those whose head was under 35 years of age reported use of a truck but no car.

Judging from these data it seems likely that in the higher income groups practically all families interested in doing so do own an automobile. Some may choose not to because of religious scruples or for other personal reasons. For many lower income families, however, using a truck instead of a car or just getting along without either is undoubtedly not so much a matter of choice as of economic necessity.

Almost half of the farmers who owned a car other than a truck reported that it was a 1950 or earlier model. Thirteen percent had a new car--that is, a 1955 or 1956 model. This age distribution for cars was not much different from that for all passenger cars registered in the United States as of July 1, 1955 4/.

---

3/ Federal Reserve Bulletin, May 1955, p. 478.

4/ Automobile Facts and Figures, Thirty-sixth Edition (1956). Automobile Manufacturers Association, p. 33.



Since farm families generally use their automobiles for business as well as for family transportation, the expenditure figure for the family account must be based on the family's judgment as to the share each use should bear of the total car expense. Spending allocated to the family share of purchase and operation of cars and trucks averaged \$194 (in 1955 1955 dollars) in 1941 and \$361 in 1955. However, the portion of total car and truck expense assigned to the family share in 1955 was smaller than at the earlier date. This may have been due to the use of different techniques in the two surveys, or to a difference in the family's judgment as to how car expenses should be divided between uses. If as large a proportion of the total had been allocated to it in 1955 as earlier, the average family share for 1955 would have been more than \$361.

The expenditure for the family share of automotive transportation was higher, on the average, in the West and smaller in the South than in other regions. Among operators at every age level it tended to increase with income. The division of expenditures between purchase and operation of car or truck was slightly less than half for purchase, slightly more than half for operation in both survey years. In both years, also, a little less than one-fourth of the families bought a car. A somewhat larger proportion bought new models in 1955 than in 1941.

Spending by farm families for transportation other than car or truck was relatively minor, and more so in 1955 when more had their own car than in 1941. Transportation by all other means took only 6 percent of the total transportation expenditure in 1941, and 4.5 percent in 1955. Of the \$17 spent in 1955, \$2.50 went for local travel by bus, taxi, etc.; \$7 for nonlocal travel by bus, train, plane, and boat; \$5.50 for purchase and upkeep of bicycles, motorcycles, etc.; and \$1.50 for other miscellaneous expenses.

### Education

Expenditures for education, as reported in our surveys, include what goes for school tuition, fees, supplies, books, and special lessons like music and dancing. Expressed as an average for all families these expenditures were small. For both farm and urban families they averaged about 1 percent of total family living expense in the survey years. In 1941 the average expenditure for all farm-operator families (in 1955 dollars) was \$16.80; in 1955 it was up to \$24. But only 42 percent of these families reported any expenditure for education in 1941, and even less--37 percent--in 1955. The average amount spent by the families who reported outlay for education was \$40 in 1941 (in 1955 dollars) and \$66 in 1955.

As we would expect, spending for education increased as the age of the oldest child in the family increased, from \$9 where this child was under 6 years of age, to \$33 where the oldest was 16 or 17, and \$48 where there were likely to be older children. Families in the middle age groups, those most likely to have several children and to have older children, reported larger education expenditures than the younger or



older groups. Spending for education rose with income in every group classified by age of the family head.

These figures do not include the biggest expense most families have in connection with sending children to college--those for food and lodging while away at school, and for the incidentals that are part of college life. We have no way of knowing how many families had children in college. However, we do know that 4 percent in 1955 reported expenses for board at school and 3 percent for lodging at school. Also, 34 percent reported expenses for meals at school, but these included meals and supplements to box lunches eaten in lunch rooms and restaurants by grade and high school pupils, as well as meals eaten by college students outside of boarding situations. Expenditures for these items in 1941 and 1955, and the percentages of families reporting expenditures were as follows:

	Average expenditure per family (1955 dollars)		Percent reporting expenditures	
	<u>1941</u>	<u>1955</u>	<u>1941</u>	<u>1955</u>
Board at school	5.61	12.12	2	4
Lodging at school	2.88	5.17	2	3
Meals at school	4.05	27.59	13	34

Although our survey data do not give us information about the number or the grade level of children attending school, we know from other sources that a larger proportion of children is enrolled in school now than in the earlier forties, and that more progress has been made in this direction by farm than by urban families. According to census reports, 75 percent of all rural farm young people between the ages of 5 and 24 were enrolled in school in 1956, compared to 56 percent in 1940 5/. Corresponding percentages for urban youth were 73 and 59.

Largest increase in enrollment has been among 5-year-olds, but the gain among boys and girls of high school and college age was substantial. The percent of farm youth of high school age (14 to 17 years) enrolled in school increased from 69 in 1940 to 86 in 1956; of those of college age (18 to 24 years) from 11 percent in 1940 to 17 percent in 1956. These figures are somewhat lower than the corresponding ones for urban young people, but the difference is much less than it used to be.

We can look forward to further changes in each of the three categories of spending that I have discussed. It is anticipated that increasing amounts of free time will become available to people as technological advances are made, both in industry and farming. That problems related to an era of shorter working days are already under consideration is indicated by the fact that the entire September issue of the Annals of the American Academy of Political and Social Science is devoted to various aspects of "Recreation in an Age of Automation."

Plans for improving educational opportunities, particularly in the field of the sciences, are being laid. And each year sees more cars on the road and more people taking more and longer trips. It will be interesting to learn in future surveys how these developments affect family spending.

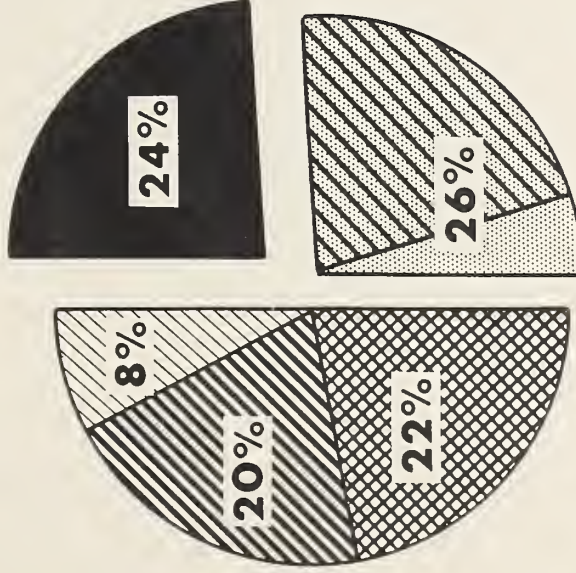
Table 1.--Percent of farm-operator families with car or truck used for family transportation, by income and age of operator; 1955




Income and age of operator	Percent of families owning car, truck, or both used for family transportation		
	Total	Car <u>1/</u>	Truck only
All families.....	87	74	13
Income (dollars):			
Under 1,000.....	72	55	17
1,000-1,999.....	87	68	19
2,000-2,999.....	93	81	12
3,000-3,999.....	97	88	9
4,000-4,999.....	99	89	10
5,000-7,499.....	99	95	4
7,500 and over.....	100	99	1
Age (years):			
Under 35.....	94	86	8
35-44.....	93	81	12
45-54.....	92	79	13
55-64.....	87	71	16
65 and over.....	71	56	15

1/ May also have truck used for family transportation.

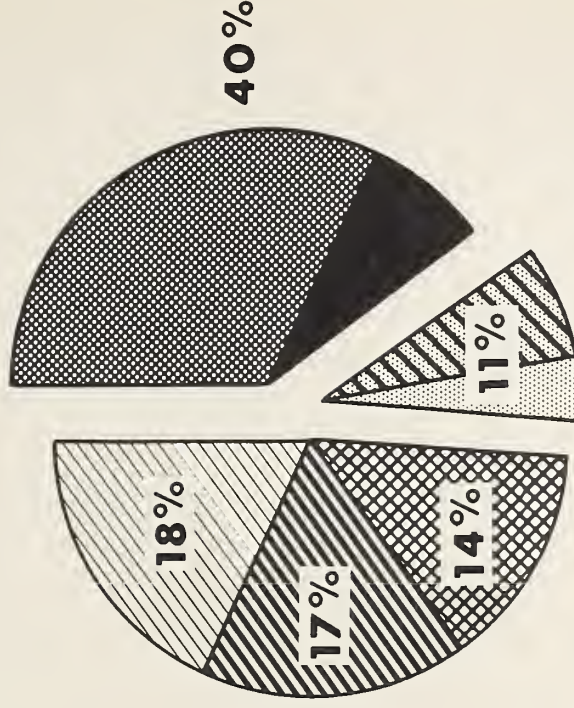
# FARM FAMILY RECREATION DOLLAR\*





1941



 **Reading**  
 **Sports equipment**<sup>o</sup>  
 **Miscellaneous**<sup>Δ</sup>

1955



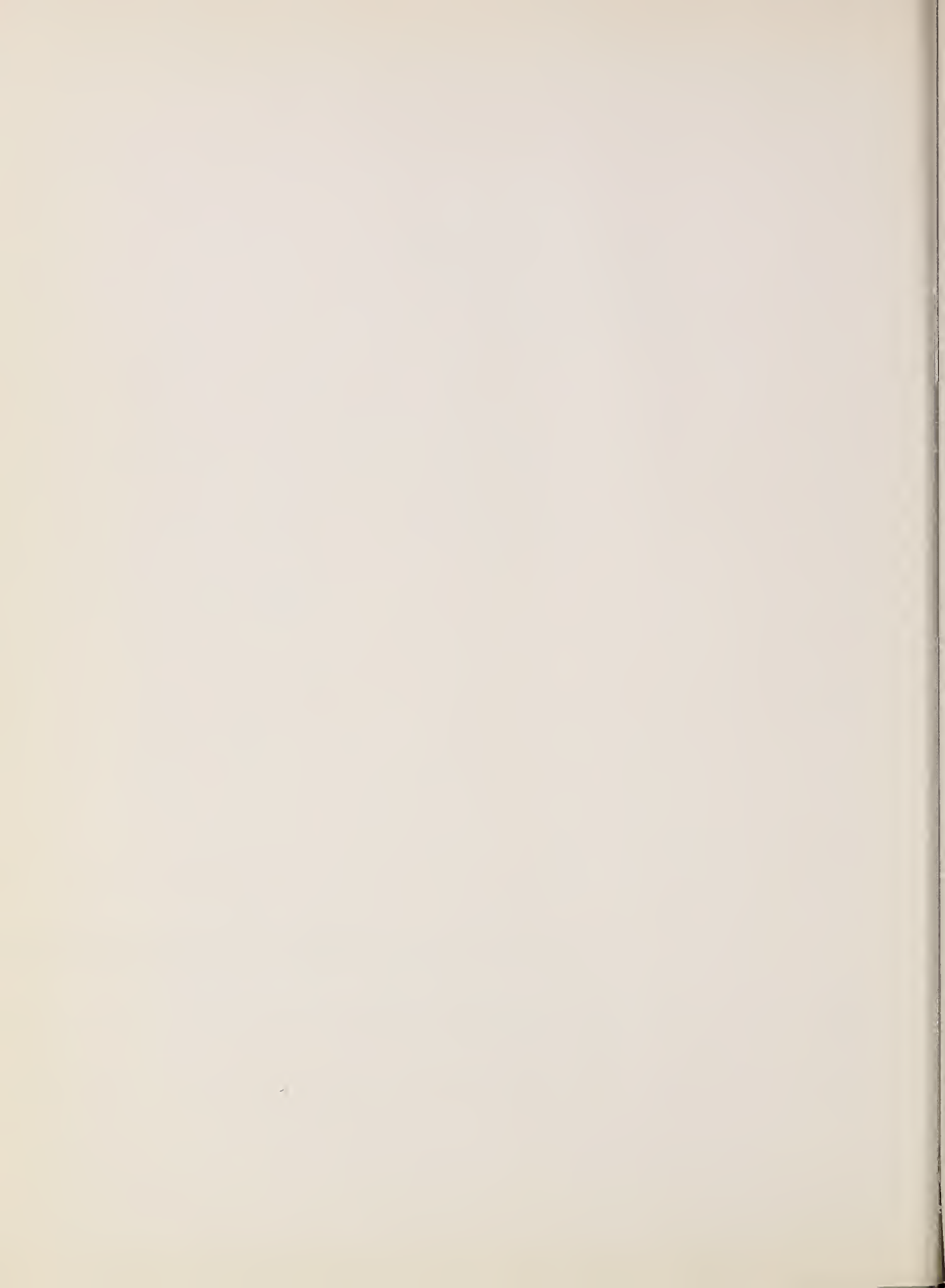
 **Radio, music**  
 **TV**  
 **Movies**  
 **Other admissions**

\* RECREATION AND READING OF FARM-OPERATOR FAMILIES  
<sup>o</sup> INCLUDES TOYS AND PHOTOGRAPHY      <sup>Δ</sup> INCLUDES DUES, ALLOWANCES, PETS, ETC.











UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Research Service  
Institute of Home Economics

CHANGES IN FAMILY SPENDING--TRENDS IN FARM FAMILY EXPENDITURES  
FOR CLOTHING

By Roxanne O'Leary, Home Economist

Family expenditure studies tell us a good deal about what is happening to farm family spending for clothing. Farm families spent an average of \$135 on clothing in 1941. Adjusted for the change in the price of apparel, that is, in 1955 dollars, the expenditure was \$263 in 1941, as compared to \$407 in 1955. The difference between these figures represents an increase of 55 percent in spending for clothing in the 14-year period.

To place clothing expenditures in proper perspective with increases in other areas of family living, let us go back a bit. Miss Brew stated that farm families in 1955 spent about two-thirds more for current consumption than in 1941 after taking into account the change in prices. So spending for clothing, with an increase of a little over half, has not kept pace with that for some of the other goods and services that make up family living. In 1941, clothing took 16 percent of the total family budget; in 1955, 14 percent.

Farm families today are not spending their clothing money the same way they did 15 years ago. Greater emphasis is now being placed on the garment care provided by service establishments outside the home. In 1941, 3 percent of the family clothing dollar went for clothing upkeep (table 1). In 1955, this percentage had increased to 7, the greatest portion of which was for dry cleaning. Men and boys over 16 years of age increased their clothing consumption considerably less than other family members. In 1941, 40 percent of the family clothing dollar was for men's ready-to-wear clothing and in 1955 this percentage had fallen to 34. Women's expenditures for ready-to-wear apparel also took a smaller portion of the family clothing dollar, decreasing from 35 percent to 32 percent.

Expenditures for all types of garments have increased but not to the same degree. It is interesting to note how family members have changed the allocation of their expenditures for ready-to-wear clothing amongst the different types of garments. In part, these differentials have been due to differences in price changes among the clothing items. For example, cotton apparel increased more in price from 1941 to 1955 than apparel made of wool or man-made fibers. On the whole, however, most changes in the way the clothing dollar is spent are probably due to changes in preference.

The changes in allocation of expenditures for ready-to-wear clothing by men and boys over 16 show an increasing preference for informal clothing. The greatest change has been a decreased emphasis on spending for dress and business suits (table 2). To replace such suits, there have been increases in the proportion spent for separate jackets and sport coats and separate trousers and slacks. A sizable increase in spending for shirts other than cotton ones is due in part to the increased popularity of woolen sport shirts and in part to the appearance on the market of nylon and Dacron shirts. Small decreases in the proportion spent for overcoats and topcoats are evident. Jackets are replacing coats for some men. There have also been decreases in spending for men's hats, particularly felt hats.

Changes in the way women have divided their clothing money amongst the various types of garments are even more marked than those for men. Women's patterns of spending in 1955 also indicate the trend toward the more informal type of garment. Dresses showed the greatest proportionate decrease in women's spending (table 3). Offsetting this there were increases for suits, skirts, blouses, and sweaters. Another indication of the greater preference for informal clothing is the smaller portion of the total spent on felt and straw hats and the slight increase for caps and head scarves. Heavy coats, footwear, and hosiery have all been given less important places in the budget. Changes in hosiery consumption show the effect of technological developments. The greater use of anklets instead of stockings is partly responsible for hosiery now taking a smaller share. But another important reason is the shift from silk stockings of the early 40's to the more durable nylons of the 50's.

#### Rural-urban differences

Results of the 1941 study showed rural farm family clothing expenditures to be 55 percent as great as those for urban families. Comparing the 1955 rural data with the latest urban spending figures <sup>1/</sup> (adjusted by the Department of Commerce expenditure data for clothing), we find that in 1955 farm families spent 87 percent as much for clothing as city families. However, we must also consider the fact that average family size was larger among the farm families than the urban families. Miss Brew has mentioned the increases in spending for clothing that accompany increases in family size. Looking at the same data on a per person basis to make allowance for differences in family size, farm clothing expenditures were 40 percent of urban in 1941 and 69 percent in 1955.

#### Income differences

Income, age, family size and composition, and geographical location all appear to have a significant bearing upon family clothing expenditures. It is impossible to isolate these factors, and they are not the only ones working, but a fairly clear picture of their general effects is apparent from our statistics.

---

<sup>1/</sup> The latest urban figures are for 1950. To make a rural-urban comparison for the same year, the urban data were adjusted to 1955 using the ratio between Department of Commerce United States aggregate expenditures for clothing in 1950 and 1955.



Let's take income first. As you would expect, income appears to be the most important single factor affecting family clothing expenditures. As income increases, clothing expenditures increase. Data from the 1955 study as well as from previous studies show that at the lowest income levels expenditures for men's clothing are greater than are those for women's. As income increases, women's expenditures rise faster than men's. The result is that a greater share of the family clothing dollar at the high income levels is devoted to the women.

#### Family size and composition

Our data give us a picture of family spending throughout the family life cycle. Among young farm operators, under 35 years, who have no children or very young children, average family expenditure for clothing is low. Those 35-44 may have more children and more teen-agers who are out-growing and wearing out clothing at least as fast as their parents can get to the store to buy new ones. Consequently, their clothing expenditures are larger. Among farm operators 45-54 years of age, whose children are becoming increasingly expensive, we find the peak in family clothing expenditures. Families whose heads are 55-64 years old or 65 and over probably have few children at home and spend less for themselves, so their clothing expenditures decline rapidly. Following this spending pattern through the life cycle for families in the income class of \$2,000-\$3,999 we find that family expenditures in 1955 increased a third from the youngest age group to the 45 to 54 age group, the highest spending level. From that point, expenditures were just halved by the time the 65-and-over age group was reached.

Family expenditures for children aged 2-15 reach a peak when the farm operator is 35-44. This stands out in table 4 because children's expenditures are shown separately until they are 15 years old, then are combined with those of the adults. When the farm operator is 35-44 he has more of the children close to 15 who naturally spend more than do the younger children. In families with heads 45-54 years old, many of the children have passed 16 and their expenditures are classified with those of the adults. This causes a drop in children's expenditures and an increase in those for adults.

#### Regional differences

Clothing expenditures also vary considerably from region to region. Expenditures per person have increased more in the South than in the North Central region since 1945. The average expenditure in the South was about 80 percent of that of the North Central region in 1945 and 95 percent in 1955. Southern families at the upper income levels are enjoying a greater share of this increased consumption of clothing than are those at the lower end of the income scale. The differences between the low-income southern and northern family spending per person and those of the high-income southern and northern families have both become more pronounced in the past 10 years. That is, the low-income families in the South in the earlier study spent less than those in the North Central region and the gap between them has become even wider. Those in the South at the upper income levels previously spent more than those in the North and as of 1955 had continued to increase their spending for clothing at a greater rate than in the North Central region.

275



Personal care

Expenditures for personal care amounted to \$69 per family in 1955. Of this, \$28 was for services such as haircuts, permanent waves, and shampoos; the remainder was for personal care materials such as cosmetics, toilet soaps, tooth paste or powder, cleansing tissues, and sanitary supplies. Personal care expenditures represented a little over 2 percent of the total budget for family living items in both 1941 and in 1955.

Table 1.--Average expenditures per family and percentage distribution of expenditures for categories of clothing expense, farm families, 1941 and 1955

Category of expense	Average expenditure per family		Distribution of expenditures	
	1941	1955	1941	1955
	<u>Dollars</u>	<u>Dollars</u>	<u>Percent</u>	<u>Percent</u>
Total.....	133	392	100	100
Clothing items.....	124	347	94	88
Men and boys aged 16 and over..	53	133	40	34
Women and girls aged 16 and over.....	47	127	35	32
Boys aged 2-15.....	13	42	10	11
Girls aged 2-15.....	11	42	8	11
Infants and children under 2...	1	4	1	1
Materials, findings, paid help for sewing.....	5	17	3	4
Upkeep.....	4	28	3	7
Shoe shines, repairs.....	1	6	1	1

NOTE: In order to keep the two studies on a comparable basis, jewelry purchase and repair and special athletic wear have been excluded although they are usually considered to be clothing expenditures.

Table 2.--Men and boys 16 years of age and over: Average expenditures per family and percentage distribution of expenditures for clothing by item, farm families, 1941 and 1955

Clothing item	Average expenditure per family		Distribution of expenditures	
	1941	1955	1941	1955
	<u>Dollars</u>	<u>Dollars</u>	<u>Percent</u>	<u>Percent</u>
All garments <sup>1/</sup> .....	53.01	131.51	100.0	100.0
Coats, jackets, sweaters .....	6.13	14.83	11.6	11.3
Overcoats, topcoats .....	2.09	3.29	3.9	2.5
Separate jackets, sport coats	2.79	9.76	5.3	7.4
Sweaters .....	1.04	1.23	2.0	.9
Raincoats, snowsuits .....	.22	.55	.4	.4
Suits, trousers, overalls .....	16.86	40.79	31.8	31.0
Dress, business suits .....	7.99	14.29	15.1	10.9
Separate dress or work pants, overalls .....	8.15	23.50	15.4	17.9
Slack suits, shorts, uniforms	.70	2.99	1.3	2.3
Shirts .....	5.91	16.82	11.1	12.8
Cotton dress shirts .....	2.00	5.45	3.8	4.1
Cotton work shirts .....	3.53	6.80	6.7	5.2
Other shirts .....	.38	4.57	.7	3.5
Underwear, nightwear .....	4.31	12.04	8.1	9.2
Socks .....	2.73	6.53	5.1	5.0
Footwear .....	10.99	25.99	20.7	19.8
Hats, caps .....	3.07	5.70	5.8	4.3
Gloves, mittens .....	1.75	4.68	3.3	3.6
Other accessories .....	1.23	4.11	2.3	3.1

<sup>1/</sup> In order to keep the two studies on a comparable basis, jewelry purchase and repair and special athletic wear have been excluded although they are usually considered to be clothing expenditures. Clothing expenditures not itemized have also been excluded.



Table 3.--Women and girls 16 years of age and over: Average expenditures per family and percentage distribution of expenditures for clothing by item, farm families, 1941 and 1955

Clothing item	Average expenditure per family		Distribution of expenditures	
	1941	1955	1941	1955
	Dollars	Dollars	Percent	Percent
All clothing items <sup>1</sup> /.....	46.58	124.50	100.0	100.0
Coats and jackets.....	7.94	15.70	17.0	12.6
Heavy coats, with fur.....	1.23	.98	2.6	.8
Heavy coats, no fur.....	2.92	6.54	6.3	5.3
Fur coats, stoles, scarves.....	1.00	.73	2.1	.6
Lightweight coats.....	2.28	5.72	4.9	4.6
Jackets.....	.35	1.09	.8	.9
Raincoats, snowsuits, other.....	.15	.63	.3	.5
Suits.....	1.27	7.36	2.7	5.9
Dresses.....	9.54	21.04	20.5	16.9
Sweaters.....	.96	3.38	2.1	2.7
Skirts.....	.71	4.89	1.5	3.9
Overalls, slacks, jeans.....	.51	2.54	1.1	2.0
Blouses.....	.68	3.53	1.5	2.8
Sunsuits, shorts, play suits.....	.05	.72	.1	.6
Aprons.....	.31	.77	.7	.6
Underwear, nightwear.....	6.36	22.68	13.7	18.2
Hosiery.....	5.11	10.66	11.0	8.6
Footwear.....	9.19	21.17	19.7	17.0
Hats, caps, scarves.....	2.40	3.95	5.2	3.2
Gloves, mittens.....	.51	1.31	1.1	1.1
Handbags, purses.....	.59	2.77	1.3	2.2
Other accessories.....	.42	2.01	.9	1.6

<sup>1</sup>/ In order to keep the two studies on a comparable basis, jewelry purchase and repair and special athletic wear have been excluded although they are usually considered to be clothing expenditures. Clothing expenditures not itemized have also been excluded.

Table 4.--Average expenditure for clothing per family by age of farm operator for families with income of \$2,000-\$3,999, 1955

Age of farm operator	Total family expense <u>1/</u>	Family member		
		Men aged 16 and over	Women aged 16 and over	Children aged 2-15
Under 35 years.....	\$393	\$127	\$103	\$98
35-44 years.....	504	140	133	166
45-54 years.....	519	179	176	104
55-64 years.....	425	153	171	50
65 and over.....	257	99	103	28

1/ Includes expenditures for infants and children under 2, materials, findings, paid help for sewing, and clothing upkeep not shown separately.

UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Research Service  
Institute of Home Economics

CHANGES IN FARM FAMILY FOOD PATTERNS

By Mollie Orshansky, Food Economist

The farmer of today, we have heard, is different from the farmer of fifteen years ago. For one thing there are fewer of him. He is likely to have a little more schooling, and although he need provide for a somewhat smaller family, he has a larger income to do it with. His family is living better--in a house more often than not equipped with electricity and other modern conveniences--and spending more for many things, including food.

Our job for the next 30 minutes will be to peer into the family kitchen and examine the changes in food practices that have accompanied these increased expenditures. For the most part our time span will be the 13 years elapsed between the study of Spending and Saving in Wartime made in the spring of 1942 and the latest Food Consumption Survey in the spring of 1955. 1/

In broad general terms we can sum up the changes that have occurred like this: Farmers today are producing less of their own food and depending more on purchases than they used to. This means, on the one hand, they are likely to enjoy a more varied diet--because they can buy things they didn't use to have--but it also means they will have less of some important foods than before, because when they must buy a food they use smaller quantities than when they produce it themselves. Thus, although their diets generally are better than they used to be, not all of the changes are nutritionally desirable.

With home production down, there is less home-canning of fruits and vegetables than there used to be, but there is now a considerable amount of home-freezing, usually of meat.

The farm housewife, like the city housewife, is spending less time in the kitchen, judging by the increase in food eaten away from home and the growing number of prepared and partially prepared foods used in the home.

And finally, although a farm family on the average still uses more food than a city family, the differences between the two in this respect, as in other areas of consumption, are growing less.

---

1/ Dates are sometimes given as 1941 and 1954 because some of the information obtained refers to the year prior to that in which the study was made.



Now for a closer look:

### Food expenditures

In 1941, when we were already feeling the inflationary impact of World War II, the average farm family spent about \$1.20 a person a week to buy food in addition to that coming from the family farm or garden. In 1955 prices this expenditure would be about \$2.65. By 1955, however, the farm family was buying food at the rate of \$4.25 per person per week or two-thirds more than the earlier rate after the allowance for rise in prices. Some of the additional money went to make up for the decrease in food produced by the family for itself, but since this dropped by only about one-fourth (in retail value at 1955 prices), it is obvious that the shift from home production to purchases is only a partial explanation.

The farm family, like the city family, has been upgrading its diet--that is, using higher-priced foods, foods with a higher degree of processing, and of course, more meals and other food purchased and eaten away from home. As shown in chart 1, the 14 percent of the food dollars spent in 1955 by the farm family for "eating out" was twice the percentage in 1941. You can see further that the farm family, which in 1941 was still using for this purpose the same share of its food money as in the depression days of the thirties, by 1955 was fast catching up to the urban family. (Actually in dollar terms at 1955 prices, the farm family was spending three times as much for food away from home as in 1941, compared with one and one-half times for the urban family.)

As one example of the shift to higher-priced foods, we might mention that in the spring of 1955 11 percent of the beef purchased by farm families in the survey week was steak (other than round) compared with only 6 percent in 1942.

### Home production

Farm families in 1955 relied on their own farms for about 40 percent of their food in money value terms at retail prices. In 1941 farms supplied nearly 60 percent of the food of the families operating them. (It has been estimated that in 1923 the share of the family food obtained directly from the farm was over 70 percent.)

Practically all farm families produced some food for their own use, but there was less production than in former years of most foods other than beef, which we know is a favorite item for the home freezer. For example, only 50 percent of the nation's farm families in 1954 produced pork for their own use compared with 71 percent in 1941. Comparable percentages for those producing milk were 69 and 89. But 45 percent were eating beef from the family farm in 1954 compared with only 21 percent in the earlier year (chart 2).

In line with the general trend toward purchasing more of their food, only a little over one-third of the farm families made their own butter compared with nearly two-thirds in 1941. (Although the drop in home production of butter is large, it may be overstated here because of the marketing practices in the North Central Region, an important milk producing area. Many North Central producers sell their milk to creameries

and buy back the butter they need at the same price per pound of butter-fat as they receive for their milk. But in the Household Food Surveys, only butter churned at home from milk produced on the same farm is considered to be home produced.)

You will note that the decrease is less for vegetables and fruits than for animal products which make up the bulk of the home-produced food in money value. At prices it would cost to buy them, the meat, milk, poultry, and eggs produced by farm families for themselves in 1954 were worth \$450, about three-fourths the amount of the total food home produced. Because there has been little decline in the total percentage of farm families home producing any food--98 percent in 1954 and 99 percent in 1941--the figures suggest that the average farm family in 1954 was producing fewer kinds of food for home use.

The decrease in home production of pork by farm families follows in some measure from their increased consumption of beef. For some items, the decline in home production is no doubt explained partly by a drop in the proportion of farms raising them for sale. Likewise the increased home production of beef is associated with an increase in the percentage of farms selling cattle as well as the increase in freezing facilities. The survey indicated that a commercial producer of milk, eggs, poultry, beef, or pork was more likely to produce some for home consumption than a farm family not producing the item for sale. Thus we might parallel chart 2 with some figures from the Census of Agriculture for 1954 and 1939:

Percent of farms reporting--

	<u>1954</u>	<u>1939</u>
<u>Sale of:</u>		
Cattle and calves .....	55	43
Hogs and pigs .....	30	30
Chickens .....	22	41
Eggs .....	35	53
Whole milk or cream .....	31	40
Vegetables (except potatoes) ....	6	8
<u>Having:</u>		
Milk cows .....	61	76 <u>1/</u>

1/ In 1940

There are differences among regions as charts 3 and 4 illustrate. Generally foods are supplied from the home farm or garden to relatively fewer farm families in the West than in the rest of the country. A notable exception is beef which is least likely to be home produced in the South, although on the whole the southern farmer relies on his farm for a larger share of the family's food than in other regions. Home-produced butter on the family table is no longer very common except in the South. In chart 5 we see the quantity produced by a family home-producing a specified food. We find a farm family in the West producing considerably more beef but much less pork than in other regions, and both the southern

283



and western family producing more milk than one in the Northeast or North Central States. This milk, it should be mentioned, includes milk used for making butter or cheese or separated for cream.

To you who work closely with farm families the practices in your region are perhaps of more interest than averages for the country as a whole. We can give only a glimpse here of the information on Home Food Production included in Report No. 12 from the 1955 Household Food Consumption Survey, now in press. This report, like the earlier ones, contains statistics not only for the U. S. but also for 4 regions. Of interest to you, too, may be the data for nonfarm families, covered by many of you in your programs. For purposes of comparison, we may say here that 3 out of 5 rural nonfarm and 1 out of 5 urban families in 1954 produced some food for themselves but in much smaller quantities than the farm families. One in 6 of the rural nonfarm families home produced poultry and the same proportion produced eggs, but in general the food produced by nonfarm families consisted of vegetables or fruits.

The 1955 survey has provided more detailed information on homegrown vegetables than previously available. Of the homegrown vegetables served fresh from the garden, tomatoes are most common; onions and snap beans are favorites also. During the growing season farm families raising tomatoes served them enough times to average at least once a day. Three-fourths of these families also canned some of their homegrown tomatoes. Those raising beans served them an average of 4 times a week. The vegetables home produced in the South include 3 that are rare in other regions: Mustard greens, raised by 50 percent of southern farm families; okra by 33 percent, and collards by 19 percent.

#### Home food preservation

Declining home production and the growing popularity of the freezer have brought about changes in food preservation practices. Most farm families (87 percent) canned foods in 1954 just as in 1941, but in lesser amounts, with the decrease more noticeable in home-produced foods canned than in those bought for the purpose. In chart 6, we see a drop in total quarts of food canned per family from 232 in 1941 to 139 in 1954; but whereas the home-produced food canned decreased nearly 50 percent, the purchased food decreased by only 15 percent.

Although some vegetables and fruits are frozen nowadays--two-thirds of the farm families in the country had a freezer or freezer locker in 1954--the quantities are too small to make up for the drop in canning. Thus the total amounts preserved are one-third less than in 1941 (one-sixth less for vegetables and nearly one-half less for fruits, (chart 7). Most of the food going into the family freezer or locker is meat, poultry, or fish and this does represent an increase so that the total quantity of these items preserved by canning or freezing in 1954 was nearly 10 times that in 1941.

Lest we leave the wrong impression, let us point out here that despite the decline in home production it is still true, particularly for vegetables, that most of the food canned or frozen by farm families is home-grown. In fact in 1954 80 percent of the farm families canning vegetables had themselves raised all they canned, and just about the same proportion raised at least some of their home-canned fruits.



Similarly 85 percent of the farm families freezing vegetables had produced them all, 70 percent of those freezing meat were freezing only home-produced meat, and two-thirds of those freezing fruits had raised some themselves.

As we know there are regional differences. We see in chart 8, for example, that farmers in the South and West on the average can or freeze smaller quantities of fruits and vegetables per family than in the Northeast or North Central States, and those in the South can or freeze less than half as much meat as those in other regions. Since the southern farm families were somewhat larger and spent less for food, the lesser amounts of home-preserved food reinforce the conclusion that they were living on a less generous diet. It was pointed out earlier that southern farm families home produced meat less than in other regions so we would expect them to freeze less. They produced as much or more fruits and vegetables as families elsewhere, but with the growing season for these foods longer in the South, a larger proportion of them could be used fresh in season, and a smaller supply reserved for the rest of the year than needed in other regions. For example, on a pound basis southern farm families canned or froze only a little over a fourth of their vegetables other than potatoes and sweetpotatoes compared with more than a third in the Northeast and North Central States.

Chart 9 shows regional differences in freezing beef and pork, items which account for 45 percent and 26 percent respectively of the food going into the average farm family freezer. The southern farm family, as we would anticipate, freezes much less pork or beef than other farm families, the western family freezes the most beef, and the North Central family the most pork. These patterns hold for the meat purchased for freezing as well as for the home-produced meat which makes up the bulk of the meat frozen.

Other differences in practices of farm families, as well as information for nonfarm families in each region may be found in the latest report issued from the 1955 Food Survey, Report No. 11, dealing with home food preservation.

#### Food consumed - the diet pattern

Turning now to the food selections that make up the diet of the farm family, as indicated by a sample week in the spring of 1955, we find farm family meals more like city family meals than once was the case. Because farm families now buy more of their food and thus partake of the technological advances in food marketing, and because many farm homes today have a freezer, it is probably true that there is less seasonal variation in farm food consumption than there used to be.

Using the money value (at retail prices) to measure the relative shares of different foods in the total of all food used at home, we see (chart 10) that since 1942 farm families, like city families, have increased the share for the meat and eggs used in the home at the expense of most other foods except what we have called a miscellaneous group--purchased prepared foods, mixtures, soups, beverages, nuts, seasonings, etc. In part this shift may reflect changing price relationships among foods, but to some extent it represents an apparent change in family preferences supported by generally higher incomes.

285

Another way to summarize food consumption for comparative purposes is to convert to calories as has been done in chart 11. Here we see that, compared with 1942, both farm and city families are getting more of their calories from high protein foods like eggs, meat, poultry, and fish, and less from vegetables, fruits, and grains. However, while city families decreased the share from fats and sugars slightly, farm families increased the percent of calories contributed by these foods from 23 to 27 percent.

Percentage distributions such as those we have just seen, while useful, have a limitation: An increase in the percentage for one item must be offset by a decrease for another, whether or not there was a decrease in actual consumption. The next two charts deal directly with the quantities of specified foods used per person in a week by city and farm families in 1942 and 1955. They serve also to illustrate how much of what might be called "the urban-farm consumption gap" is closing.

First let us look at the increase in meat, chart 12. At the beginning of World War II farm households used three-fourths pound less meat, poultry, and fish per person in a week than urban households, and only 36 percent as much beef. By spring 1955 both groups were eating more meat, but farm families now had only one-half pound less per person than urban, and 86 percent as much beef. The figures for meat, poultry, and fish also give us an illustration of how much more variety the farm family now has in its diet. In 1955, practically every farm family--99 percent--used at least one form of these foods during the survey week, whereas in 1942 10 percent had none. Moreover, when we consider specific foods, such as pork, beef, or poultry, we find each of them being used by more families in 1955 than in 1942. As the following percentages show, by 1955 not only did most farm families have some pork during the week, but the majority of them had at least one cut of beef or poultry in addition:

Percent of farm families using--

	<u>1942</u>	<u>1955</u>
Pork .....	56	90
Beef .....	42	78
Poultry .....	23	50

Chart 12 also shows city and farm families more alike in milk consumption in 1955 than formerly, but while a city family member now had the equivalent of 0.6 quart more milk than before, the farm family member was getting 0.4 quart less. This decrease for the farm family is explained by decreased home production: Families buying milk use less than when they get it from their own cows. The decrease, however, is limited to fresh milk--consumption of milk products such as commercial ice cream and cheese increased by two-thirds while that of urban families increased by one-tenth. In 1955 farm families were buying ice cream, like many other processed foods, at nearly the same rate as urban.

In sources of calories and in money value of food we saw a decrease in the share from grain products and vegetables. Here we see, (chart 13), that for grains, quantities per person were less, but for vegetables they actually were greater. Farm families in 1955 used 20 percent more vegetables per person than in 1942, while urban consumption remained almost



unchanged. Thus farm consumption was not 90 percent of urban compared with 72 percent earlier. Similarly farmers in 1955 had two-thirds as much commercial baked goods per person as urban families, whereas in 1942 they had only one-third as much. Meanwhile they cut down on flour and cereals so that total grain products per person were now 1-1/3 pounds more than in city families instead of nearly 2 pounds more in 1942.

One notable exception to the growing similarity of farm and city diets is in fats and sugars. As mentioned above, city dwellers decreased their share of calories from these foods between 1942 and 1955 while farmers increased theirs. We will see later that the proportion of farm families buying soft drinks for home consumption nearly quadrupled between 1942 and 1955, while the proportion of city families increased by only two-thirds. The total amount of sugars and sweets used in the home per person in farm families was 1.8 pounds in 1955, 0.4 pounds more than in 1942. City families used 1.1 pounds per person in 1955, only 0.2 pounds more than in the earlier year.

For fats, per capita consumption by city dwellers was slightly less in 1955 than in 1942, but in farm families it was higher. Chart 14 shows that the trends in farm and city buying practices for fats were diverging also. The proportion buying vegetable shortening or cooking oil increased much more in this period for farm than for city families; in addition, the percent of city families buying lard or butter decreased considerably, while the percent of farm families buying butter increased and the percent buying lard stayed almost unchanged. Decreased home production lowered the proportion of farm families using any butter almost as much as among city families between 1942 and 1955, but not for lard.

#### Purchased processed foods, home baking

The farm homemaker, like the city homemaker, is increasing her use of food services to ease the work of feeding her family. In spring 1955, 32 percent of the dollars spent by the farm family for foods to eat at home in a week went for a select list of commercially prepared and partially prepared foods <sup>1/</sup> that took only 22 percent of the food dollar in 1942. Because the farm housewife gets some food from the family farm or garden, the share of her food money for these convenience foods is greater than for the urban housewife who spent only 27 percent of her food money for them in 1955 (chart 15).

Chart 16 illustrates for some common foods--ice cream, soft drinks, lunch meats, and margarine--how much alike the farm and city family's weekly shopping lists have become. And we might add that the farm family buying these foods is buying as much as the city family and sometimes more. You can see in this chart, as mentioned earlier, the greater increase since 1942 in the proportion of farm families buying bottled soft drinks to use at home.

<sup>1/</sup> Baked goods, flour mixes, ready-to-eat cereals; ready-cooked pastes; frozen and canned fruits and vegetables; cooked and canned meats, lunch meats; ice cream, jellies, candy, prepared desserts; soups, pickles, olives, relishes; sauces and salad dressings; other prepared or partially prepared dishes.

287



Some changes in household food preparation are illustrated by the decrease in home baking, shown here for the two largest farm regions. In the North Central Region (chart 17), the percent of farm homemakers baking some common items at any time during a month in spring 1955 was considerably less than in 1948, the other year for which data are available.<sup>1/</sup> (Generally we may assume that a homemaker not baking an item during a month does not make it regularly.) The largest decrease occurred in the case of bread and rolls which take the most time to make and which would need to be made in considerably larger quantities because they appear on the family table more regularly than other baked goods.

In the South (chart 18), the pattern is similar, with the added note that there is much less decrease in home baking of biscuits than for other items.<sup>2/</sup> It is gratifying to have our statistics confirm our impression that southern farm families still like their hot bread! And, as we see in chart 19, they're not using mixes to make them with, either. Commercial mixes were used by only 2 percent of the southern farm homemakers making biscuits in the survey week in spring 1955, 7 percent of those making pie crusts, and 24 percent of those making cake. Corresponding figures for the North Central homemakers using mixes are 19 percent of those making biscuits, 9 percent for pie, and 40 percent for cake.

Despite the tendency for the housewife to buy food with a greater degree of processing, it is obvious from these charts that except for bread which is usually bought, baked goods used in the farm home are likely to be made there. This pattern holds for urban families too, although they do more buying and less baking in general. Chart 20, summarizing baking and buying practices for a week in 1955 for the U. S. as a whole, shows that the percentage of farm households using commercial mixes is about the same as the urban. However, because fewer urban families bake, a larger proportion of the items they bake are made from a mix. Among urban homemakers 56 percent of those making a cake used a commercial mix, 31 percent of those making biscuits, and 21 percent of those making pie. Among farm homemakers, mixes were used by 24 percent of those making cake and 8 percent of those making biscuits or pie. Cookies, not shown on the chart, were baked in 9 percent of urban and 22 percent of farm homes during the survey week. In 20 percent of these city homes and 8 percent of the farm, the cookies were made from commercial mixes.

The practices with respect to these flour mixes are in line with the findings of a recent pilot study in Minnesota on relative time and money costs of preparing baked products by different methods <sup>3/</sup>. This

---

<sup>1/</sup> Farm family housing needs and preferences in the north central region. P. Nickell, M. Budolfson, M. Liston, and E. Willis. No. Cent. Reg. Pub. 20, 173 pp. illus. Feb. 1951. (Iowa Agr. Expt. Sta. Bul. 378) (No. Cent. Reg. Proj., BHNHE Cooperating)

<sup>2/</sup> Farm housing in the South. South. Coop. Ser. Bul. 14, 274 pp. illus. /1951/ (South. Reg. Proj., BHNHE Cooperating)

<sup>3/</sup> "Pilot Study of Money and Time Spent in Preparing Baked Products from Individual and Premixed Ingredients," by E. Asp, I. Noble, and F. Clark, Journal of Home Economics, Vol. 49, No. 9, Nov. 1957, pp. 717-719.

study found that the average amount of time saved by 10 homemakers in making cake from commercial mixes was one-third that spent in making it from "scratch." For pie crust and biscuits it was one-fourth, and for cookies (chocolate chip) one-half. But the money costs of the mixes over the products made from individual ingredients were one-fifth greater for cake, one-half for biscuits and cookies, and three-fourths for pie crust. Factors other than time and money, such as acceptability of the final product and the degree of cooking skill required, no doubt are involved, but, according to the Food Consumption Survey, in choosing among the four items considered the housewife tends to give priority to those saving her relatively the most time for the least money.

Other data on home baking practices in farm and nonfarm households in the U. S. and 4 regions are included in Report No. 13 from the 1955 Household Food Consumption Survey, now in preparation.

### Implications

And now that we've followed the farm wife on her way from the garden, the pantry, the freezer, and the grocery store into the kitchen--to say nothing of a few trips to the restaurant in town--what can we say about the food on the dining room table? Have the changes all been good ones? It is obvious that they have resulted in a more expensive diet, and as economists we would have to say that this trend is likely to continue. Most of us would, I think, also agree that a more varied diet, one that takes less time and effort for the housewife to prepare and gives her more time to devote to her family, her community interests, or to the job with which often she is augmenting the family income, has its advantages. As persons concerned with the welfare of farm families, however, we'd like to be sure these outweigh possible disadvantages. For this we need an over-all index of the net effect of changing food consumption patterns. One such measure, albeit only a partial one, is the nutritional adequacy of the diet, and in this respect, though there has been improvement, there are some warning signals.

The earliest nationwide evaluation of dietary levels was made in 1935-36. In those depression days, by standards different from those now considered nutritionally desirable by the National Research Council, it could be said that one-third of the nation's nonfarm families and one-fourth of the farm had "poor" diets. In 1955, by the same standards only one-tenth of the nonfarm diets and one-seventh of the farm would be called "poor." Thus farm diets have improved, although not so much as the nonfarm. However, looking back to 1942, the starting point for most of our discussion, we see that in shifting from home production to purchases and eating more like city families, farm families may be picking up some of their bad habits along with the good.

On the plus side, we find, for instance, that in buying more of their fruits and vegetables farm families chose well enough to keep the average amount of ascorbic acid--always a critical nutrient for farm families--at almost the same level per nutrition unit 1/ as in 1942. During the same

---

1/ Determined by adjusting the number eating out of family food supplies for estimated need on the basis of age and sex.

289



period food supplies of city families showed a drop in ascorbic acid, so the farm level in 1955 was 85 percent of the urban compared with only 80 percent in 1942. On the other hand, buying rather than producing milk lessened the advantage farm diets usually have over city diets with respect to calcium. In the period studied city families increased their milk consumption and raised the average amount of calcium per nutrition unit more than 20 percent. Farm families, on the other hand, decreased their consumption of milk. Because they used more cheese, ice cream, and other milk products than before, however, the average calcium per nutrition unit remained the same. Nevertheless, the farm family in 1955 had on the average only 14 percent more calcium than the city family, rather than 38 percent more as in 1942.

Although both farm and city families were using more meat in 1955 than formerly, the farm/city ration for protein per nutrition unit was only 102 compared with 110 in 1942. This too is in large part a result of changing milk consumption. In 1942 farm families got 28 percent of their protein from milk and milk products, and city families only 21 percent. In 1955 farm families got 24 percent of their protein from milk and city families 22 percent.

Admittedly, these nutrient trends are neither the only criteria, nor are they infallible ones. But as we see our farm families change their practices--cut down on home preservation of fruits and vegetables and increase home freezing of meat, eat more of their meals away from home, home produce less of their food and buy more,--we must change the nature and scope of our programs accordingly. We may be able to help the family cutting down its home production to concentrate its efforts on those items representing the largest net saving or those for which commercial market supplies might be less satisfactory than foods produced or preserved at home. We must place special emphasis on the wise selection and use of purchased foods out of the greater variety from which the farm family can now choose. This should help the family make most economical use of its dollars. It should also protect the family taking on city ways from losing out on one advantage of living on a farm that used to be taken for granted, namely the probability of having a better diet.



Chart 1

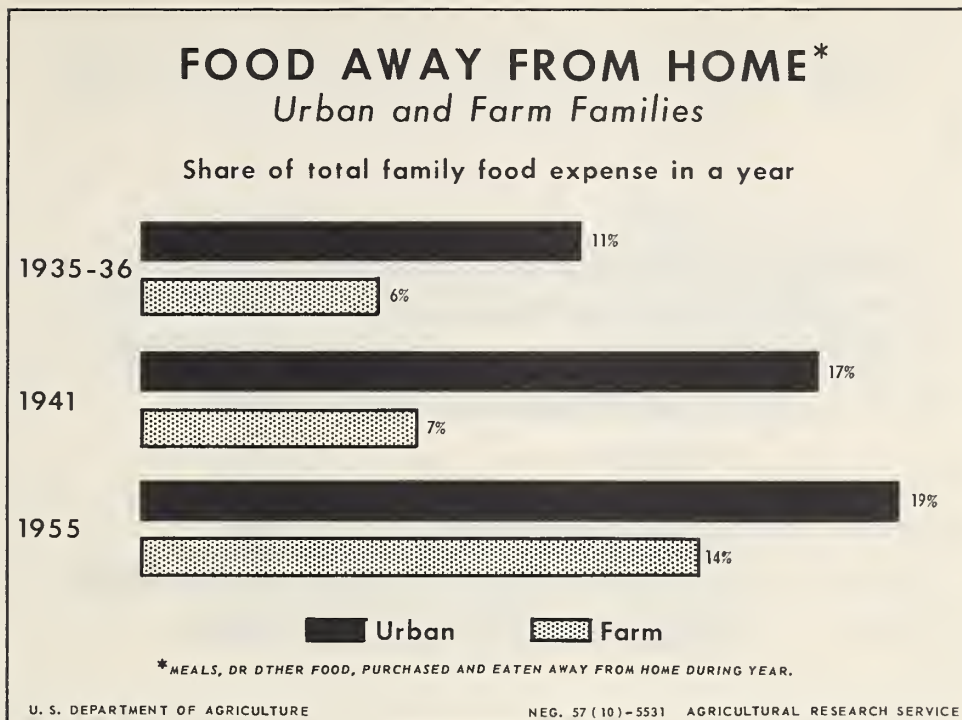


Chart 2

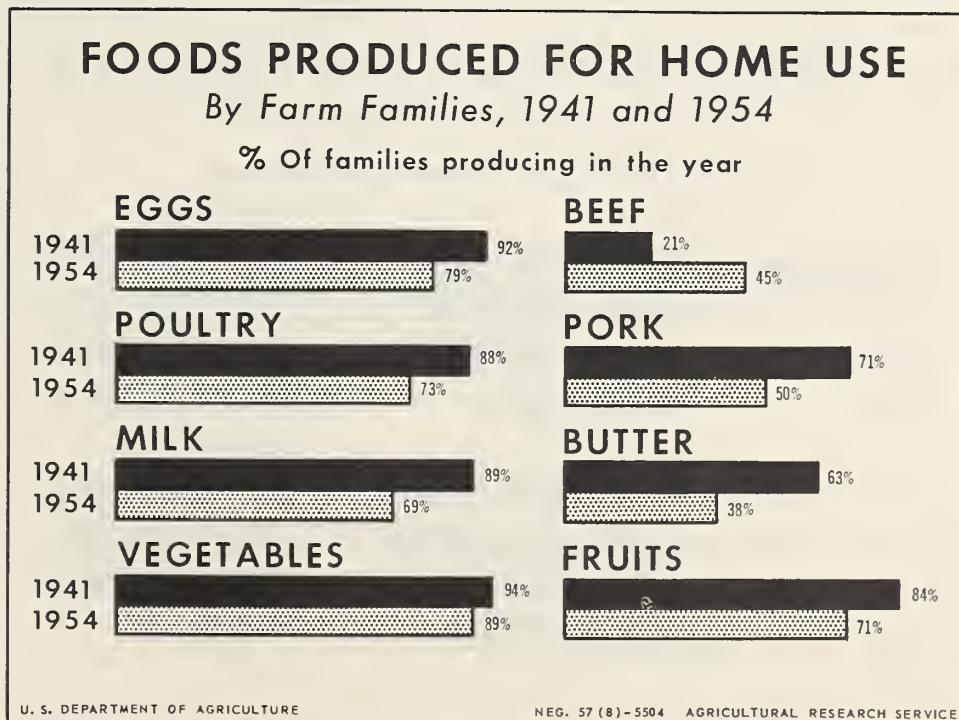


Chart 3

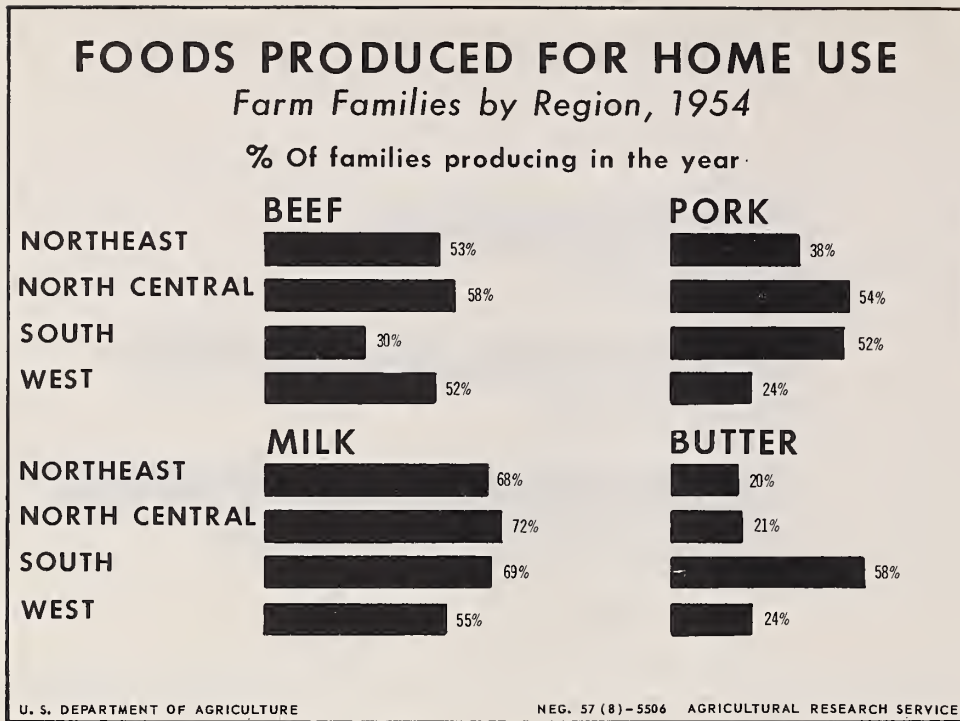


Chart 4

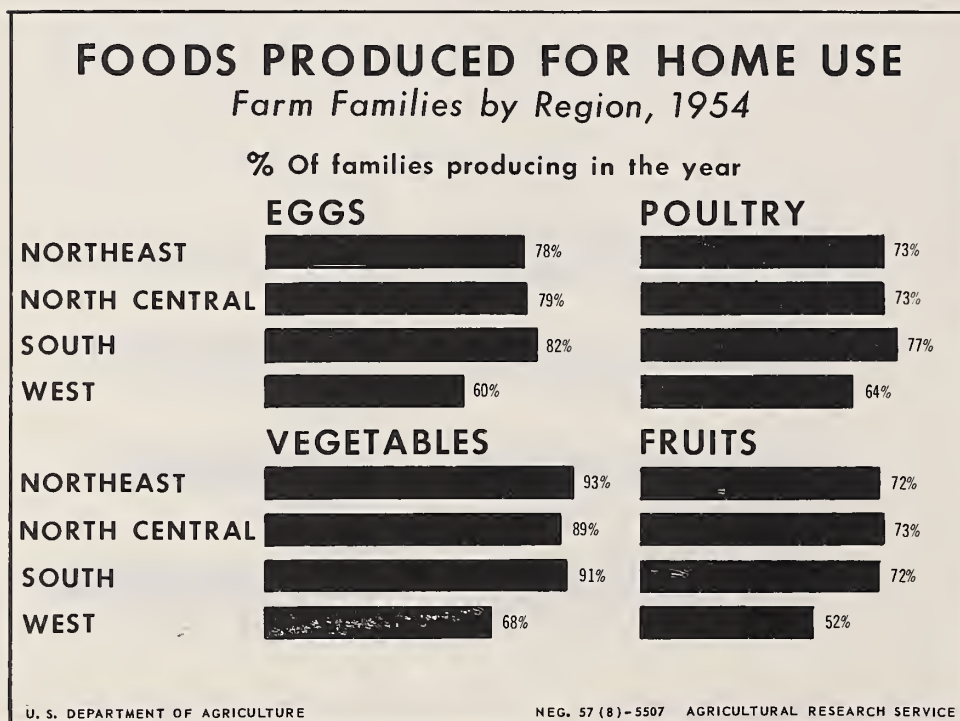


Chart 5

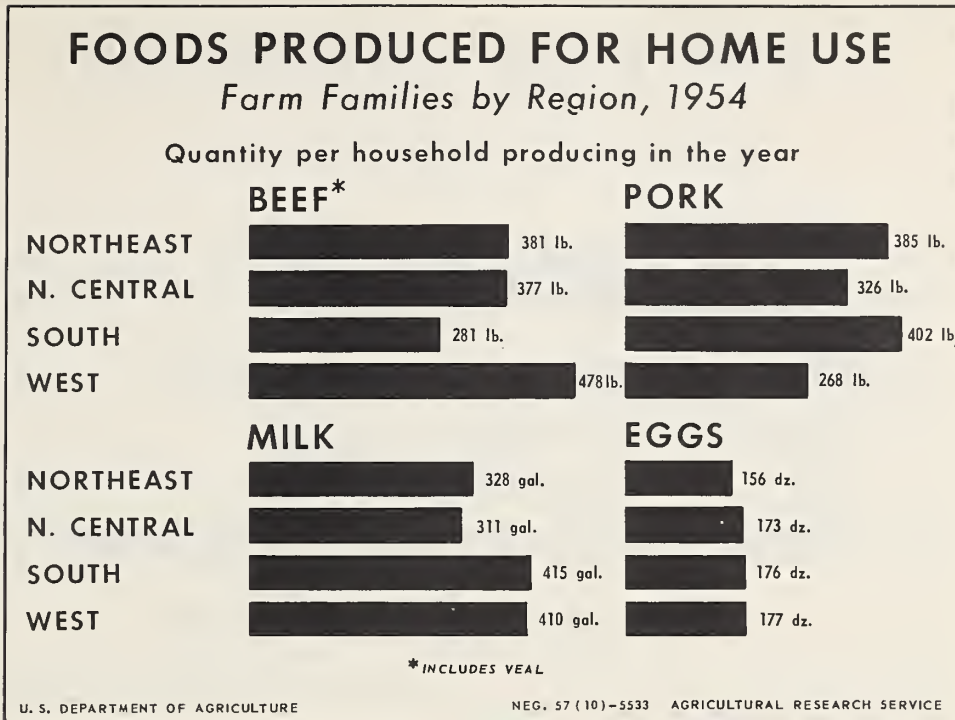


Chart 6

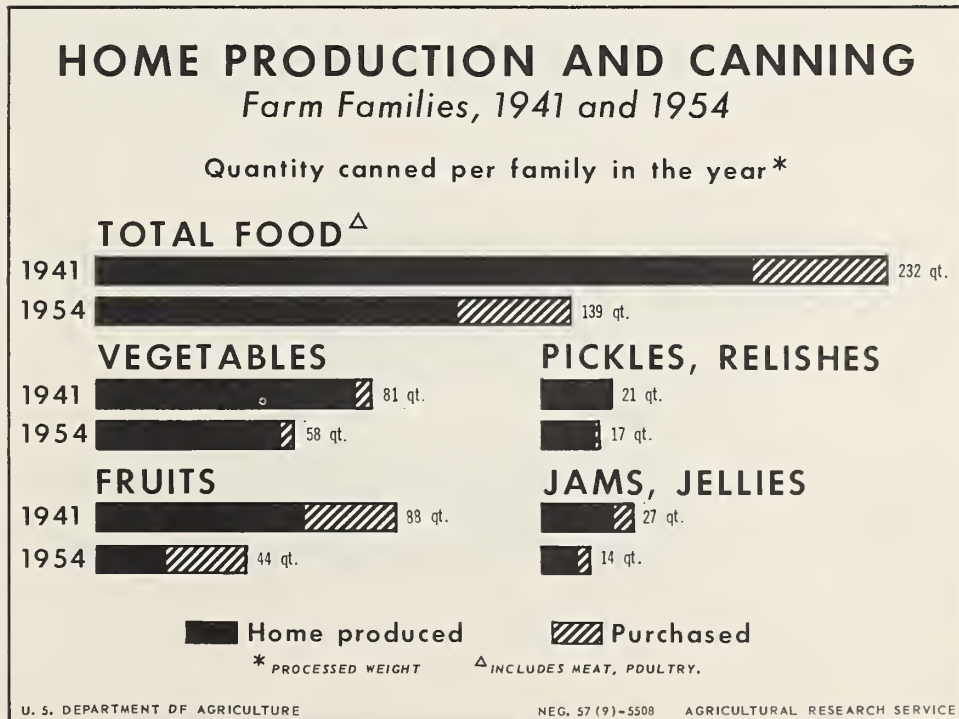




Chart 7

## FOODS CANNED AND FROZEN

*By Farm Families, 1941 and 1954*

Quantity preserved per family in the year\*

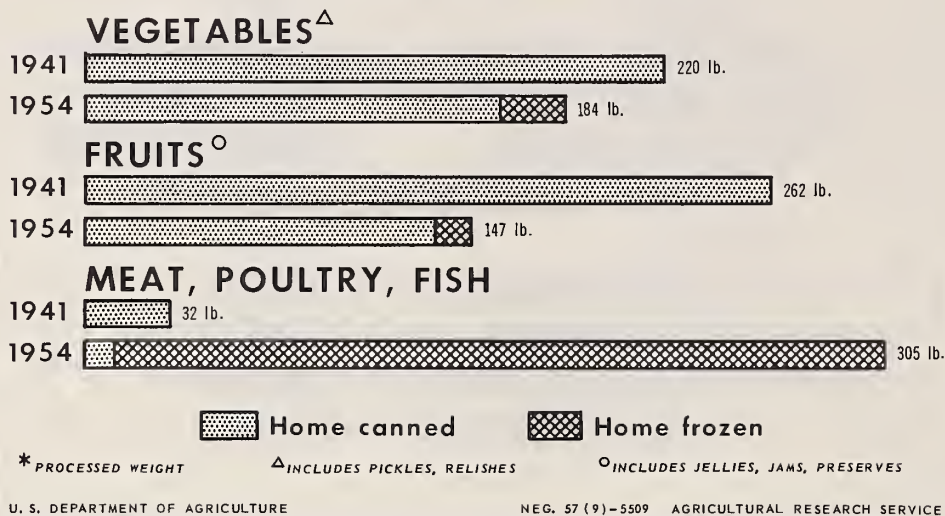


Chart 8

## FOODS CANNED AND FROZEN

*Farm Families by Region, 1954*

Quantity preserved per family in the year\*

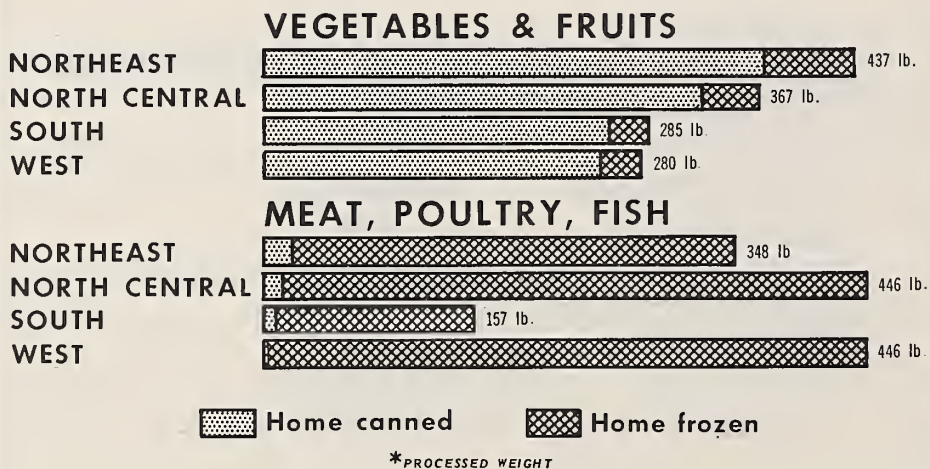


Chart 9

# HOME PRODUCTION AND FREEZING

*Farm Families by Region, 1954*

Quantity frozen per family in the year\*



U. S. DEPARTMENT OF AGRICULTURE

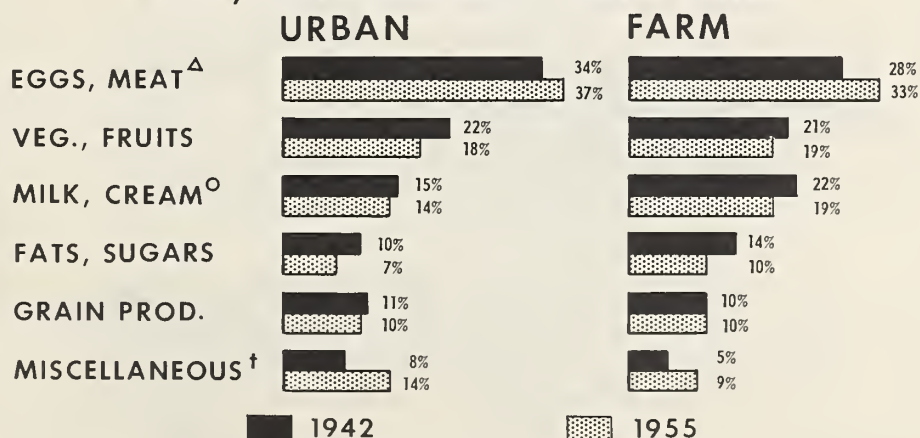
NEG. 57 (9)-5511 AGRICULTURAL RESEARCH SERVICE

Chart 10

# DIVISION OF FOOD DOLLAR

*Urban and Farm Families, Spring 1942 and 1955*

Money value of food used at home in a week\*



\* EXPENSE FOR PURCHASED FOOD AND RETAIL VALUE OF HOME-PRODUCED FOOD

<sup>Δ</sup> INCL. POULTRY, FISH    <sup>○</sup> INCL. ICE CREAM, CHEESE    <sup>†</sup> BEVERAGES, OTHER

U. S. DEPARTMENT OF AGRICULTURE

NEG. 57 (10)-5529 AGRICULTURAL RESEARCH SERVICE

29-

Chart 11

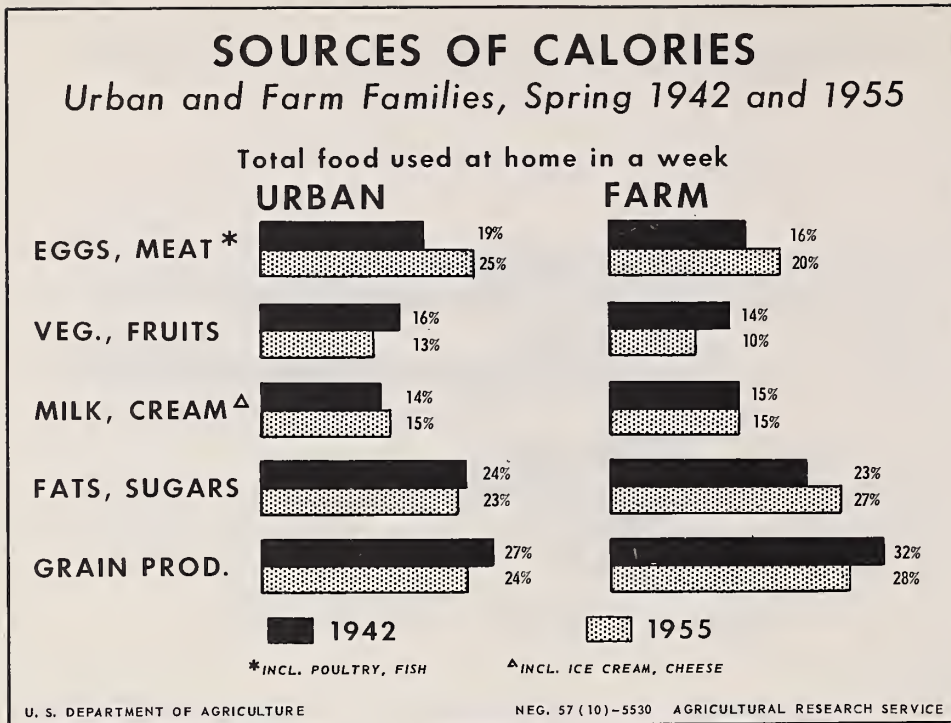


Chart 12

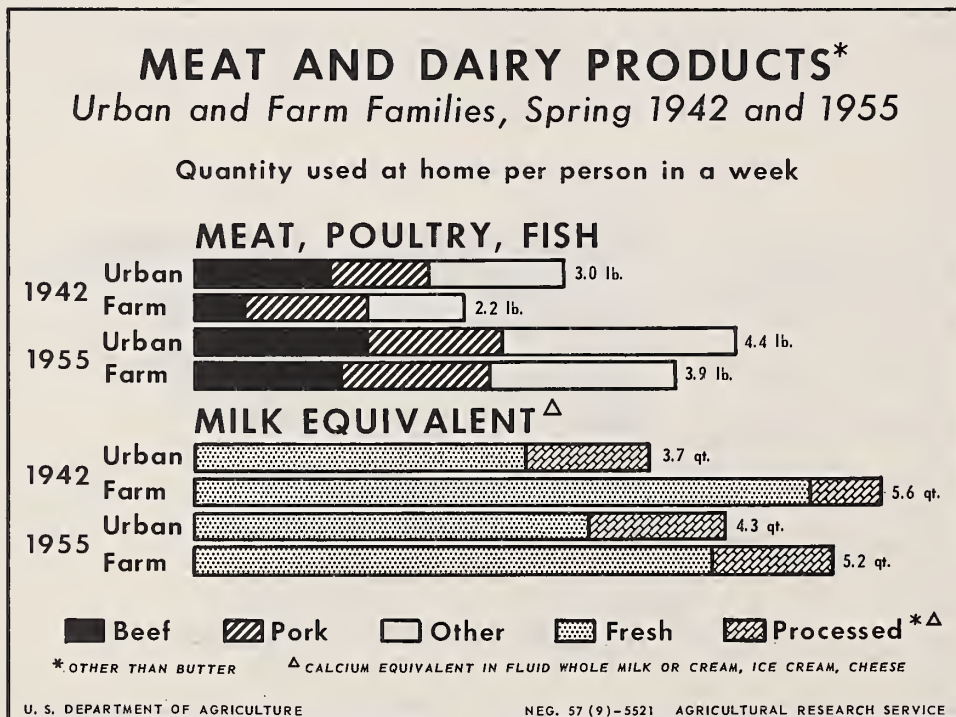


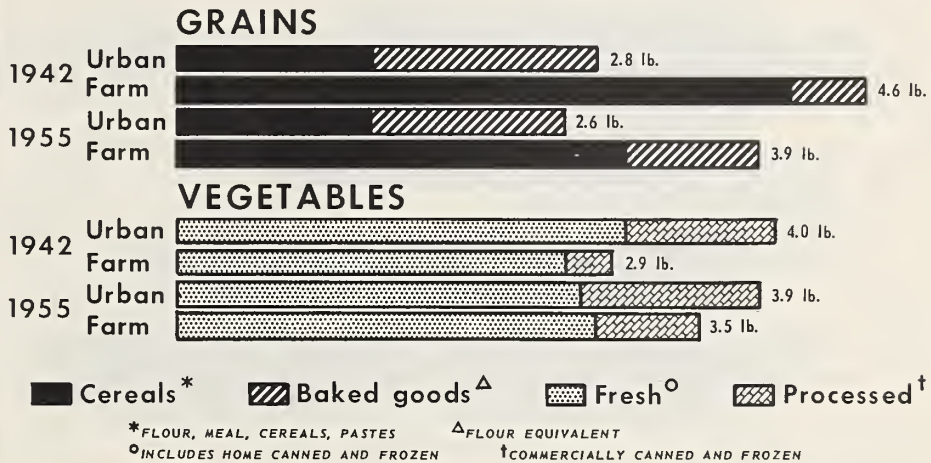


Chart 13

## GRAIN PRODUCTS AND VEGETABLES

*Urban and Farm Families, Spring 1942 and 1955*

Quantity used at home per person in a week



U. S. DEPARTMENT OF AGRICULTURE

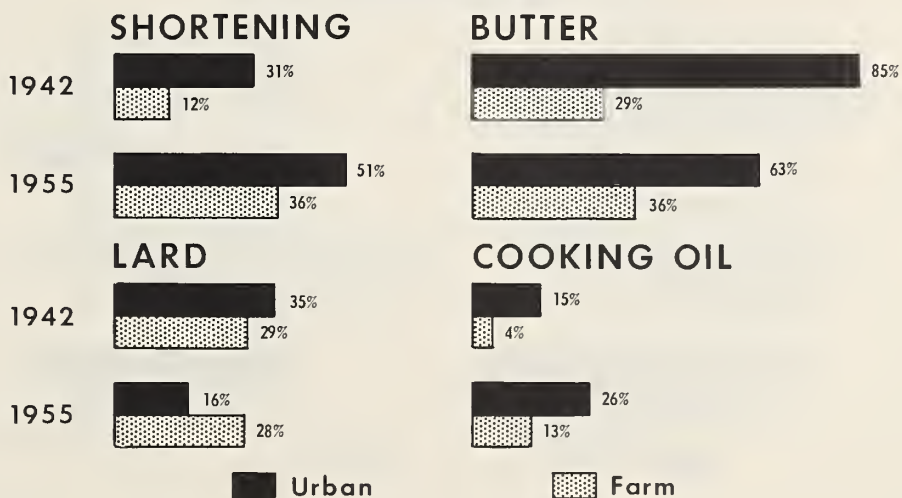
NEG. 57 (9)-5522 AGRICULTURAL RESEARCH SERVICE

Chart 14

## PURCHASED FOODS

*Urban and Farm Families, Spring 1942 and 1955*

% of families buying in a week



U. S. DEPARTMENT OF AGRICULTURE

NEG. 57 (10)-5534 AGRICULTURAL RESEARCH SERVICE

297

Chart 15

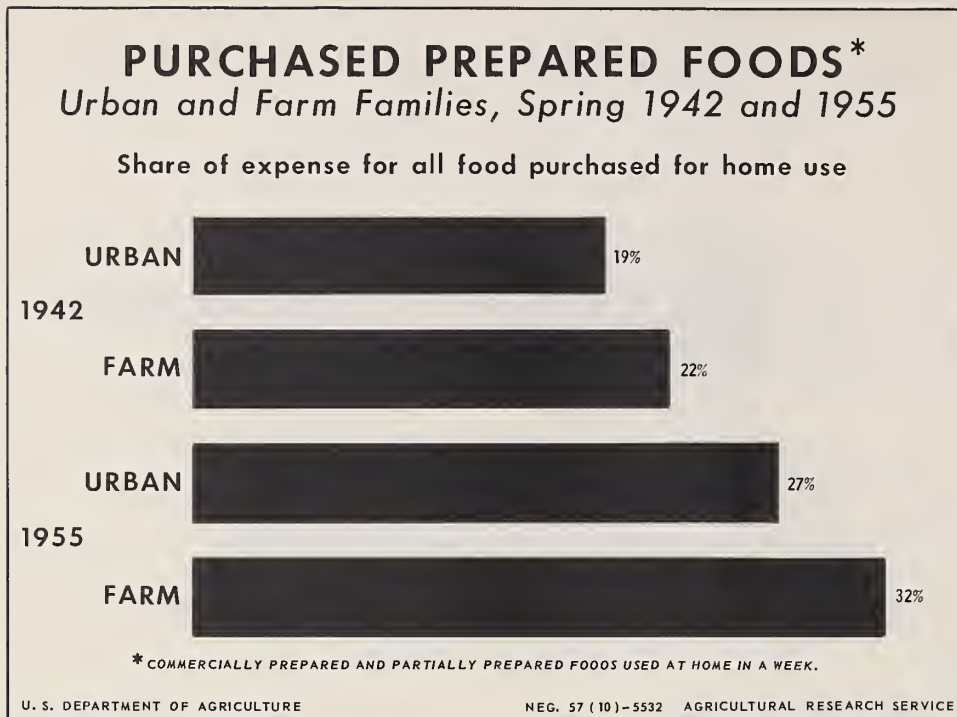


Chart 16

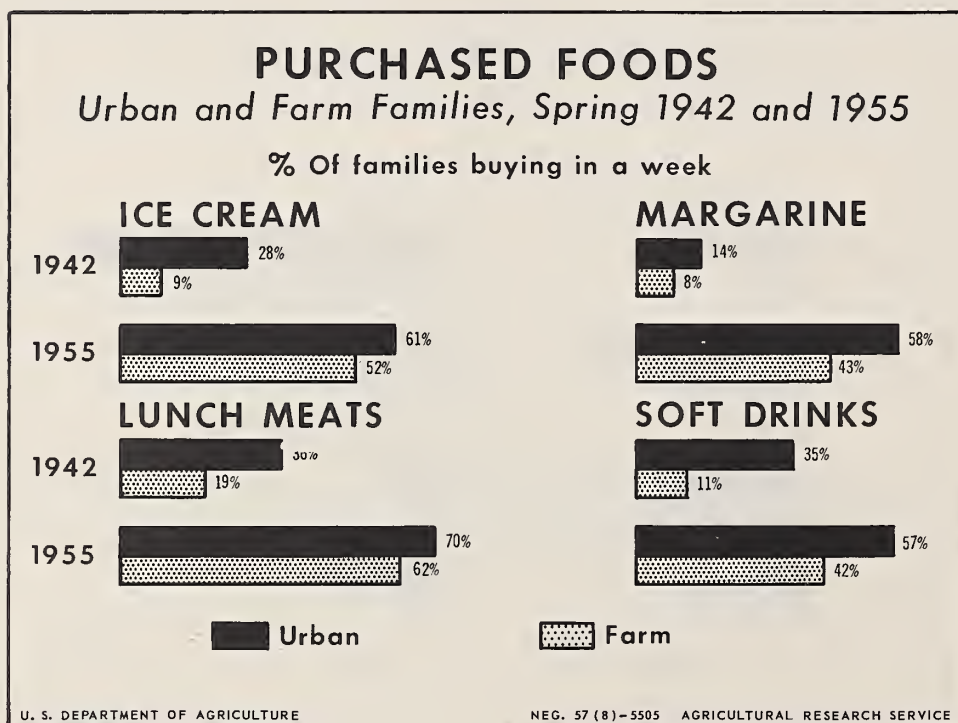


Chart 17

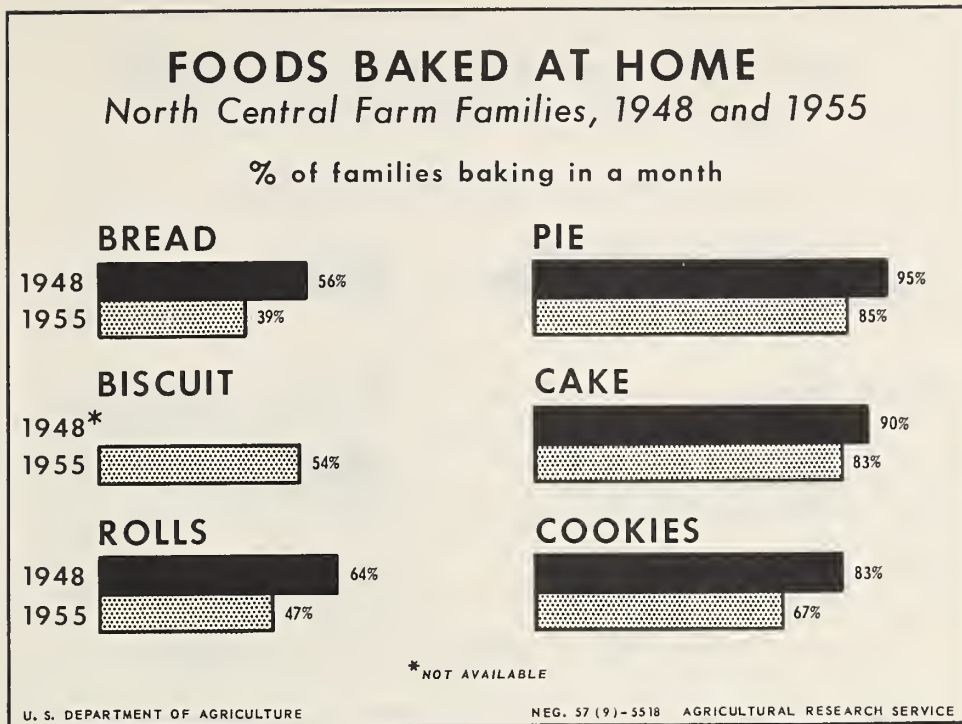


Chart 18

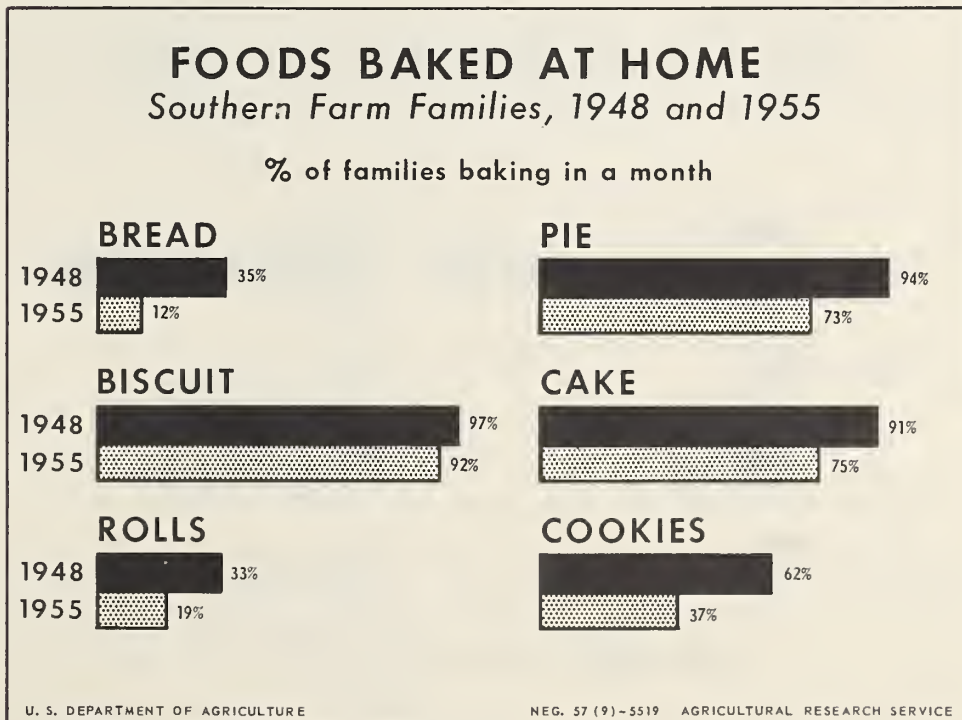




Chart 19

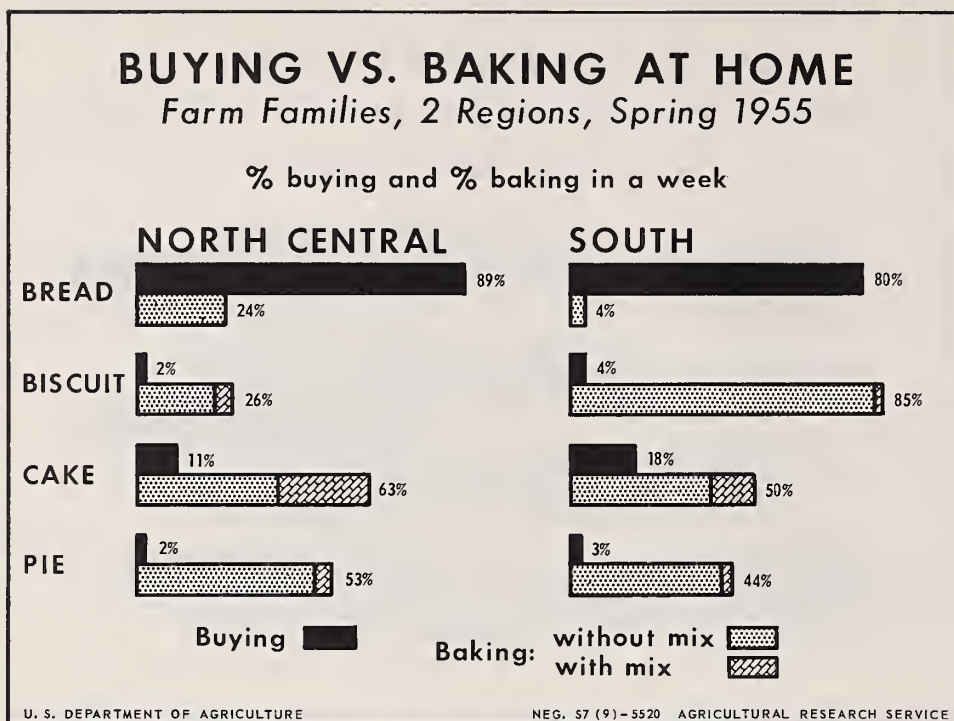
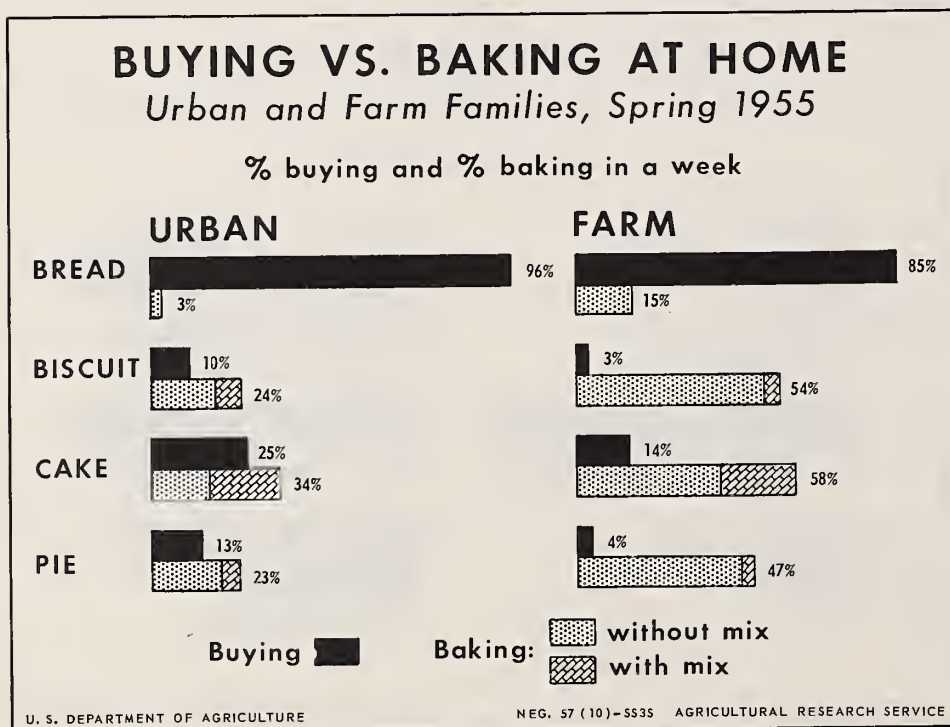


Chart 20



UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Marketing Service  
Agricultural Economics Division

CHANGES IN POPULATION AND FAMILY CHARACTERISTICS

by Gladys K. Bowles, Farm Population and Rural Life Branch

Patterns and trends in spending are to some degree determined by population and family numbers and characteristics. A large family spends more for food and less for some other items than a small family. One person who lives alone may buy a larger proportion of his food in restaurants than any member of a several-person unit. The items for which money is spent will be quite different for the family with young children and the family composed only of old people. Families living in or near urban places will purchase regularly some things their rural or farm neighbors seldom have to buy. It is my purpose now to present some information on population and family changes which will be of help in appraising the significance of spending patterns.

- - - - -

Before beginning a discussion of certain trends and changes in population and family composition, I should like to take just a minute to enumerate a few population facts which will establish the population picture in the United States as it stands today.

- (1) The population of the United States, including armed forces overseas, now numbers about 172 million people.
  - (2) Slightly over half of the population are females.
  - (3) Fifty-seven million are young people under 18. Over 14 million are people 65 years old and over.
  - (4) About 12 percent now live on farms.
  - (5) Over 71 million are in the labor force.
  - (6) Nearly 40 million are enrolled in school or college.
  - (7) The civilian population and the armed forces personnel living off post or on post with their families live in 49.5 million households, averaging about 3.39 persons per household.
  - (8) About 68 percent of the people are married.
- - - - -

Presented at the 35th Annual National Agricultural Outlook Conference,  
November 20, 1957, Washington 25, D. C.

Of particular interest to many of us here today are the farm and other rural populations. For more than a century after the first census was taken in 1790, this was largely a rural country. In 1890 about 65 percent of the total population lived in rural areas (Table 1). Since then the United States has undergone rapid urbanization and industrialization. The change from a predominantly rural to a predominantly urban population occurred during the life time of many of us in this room today. Some time between 1910 and 1920, probably in the latter half of 1917, for the first time more people were living in urban than in rural places in the United States. Today our rural people number many millions fewer than the urban residents.

Since 1916, with a few interruptions, the trend in the number of persons living on farms has been generally downward. The two principal reversals of the trend occurred in the depression years of the 1930's and in the years immediately after World War II. Now, in 1957, it is estimated that there are about 20,396,000 persons living on farms in the United States (Chart 1 and Table 2).

Between 1950 and 1957 there were heavy decreases in the number of farm people 18 to 44 years old and lesser ones at all other ages. At the present time less than one-third of the farm population is between the ages of 18 to 44. Because of the disproportionate decreases among the age groups, the oldest and youngest groups comprise larger proportions of the farm population in 1957 than they did in 1950. This age distribution creates a high ratio of persons of dependent ages to those of working age.

The proportion of farm residents in the total population has fallen rapidly with the continued growth of the total population (Chart 2 and Table 3). In April 1957 only 12.0 percent of the Nation's people lived on farms, a decline from 35 percent in less than 50 years, and a decline from 16.6 percent since 1950.

Lowered requirements for manpower in agriculture, increased opportunities for employment in nonagricultural industries, and the unfavorable disparity in certain regions between farm and nonfarm incomes are the major factors to which the downward trend in numbers of farm people is generally attributed. Search by farm people for educational advantages, change of residence for retired persons, and quest for other opportunities are also important. And for many, service in the armed forces means leaving the farm never to return permanently.

Because farm births usually exceed farm deaths, most of the farm population loss occurs through migration of persons to non-farm residences. The remaining loss is the net result of changes in the classification of dwelling units as farm or nonfarm, without movement of the residents. The extent of decline in farm population caused by such reclassification is not precisely known. There is



evidence that it has been substantial in recent years. Most of us know of farms which have been "subdivided," or of land which has been taken over for roads, airbases, reservoirs, or converted to other nonfarm uses. Most areas of the United States have experienced heavy rates of outmigration from the farm population since 1940, but particularly high rates occurred in the South and in the North Central States.

For older persons a new factor has come into play which is thought to have contributed to changes in their number in recent years. This is the opportunity afforded older farm persons to retire from farming under the Old Age and Survivors Insurance Program. To the extent that such people cease operations on their land, they may no longer be counted in the farm population, but rather be included with the rural-nonfarm. If they retire to nonfarm residences, their land may continue to be farmed without a resident farm family. On the other hand, there is some evidence that after the extension of social security coverage to older persons, some farmers remained on farms who might have been expected to retire and some returned to farming long enough to obtain coverage. Estimates made cooperatively by the Bureau of the Census and the Agricultural Marketing Service for 1956 showed about the same number of people 65 years old and over on farms as in 1950, and data from the Survey of Farmers' Expenditures in 1955 of the Department of Agriculture and the Bureau of the Census, of which you will hear more later, indicate that there may have been somewhat of an increase in number of farm operators 65 years old and over between 1954 and 1956. Between 1956 and 1957, however, the estimates of the Census and AMS indicate a decline of about 13 percent for farm men in this group.

There are 109 males among farm residents for every 100 females. Still farms are not particularly good places for most of us to hunt for husbands, as in age group 25 to 44 there are more women than there are men. In all other age groups, however, there are more men than women.

The employed labor force residing on farms in April 1957 numbered 7.7 million (Table 4). Of these, 62 percent were employed wholly or primarily in agriculture. The percentage of farm residents employed in nonagricultural industries has increased markedly since 1930 (Chart 3) and farm families have probably become increasingly influenced in their spending patterns through their employment and other contacts with urban life. In April of this year, nearly 3 million farm resident people were working principally at nonfarm work. Of these slightly over 1 million were women. Nearness to metropolitan centers and other urban centers strongly affects principal occupation of farm resident people. Within Standard Metropolitan Areas, 53 percent of the employed farm residents were in nonagricultural jobs compared with 35 percent of those who lived outside metropolitan territory.

221

A good deal of spending for living items is done for households and families as groups rather than for individual members. Thus, in addition to knowledge about numbers of people, we are interested in the numbers and composition of households and families.

In March 1957, there were an estimated 49.5 million households in the United States, an average increase of about 850,000 during the 1950 to 1957 period. On the average, nonfarm households increased about a million a year while rural-farm households decreased about 150,000 on the average a year during the same period, accompanying the decrease in farm population (Table 5). In March 1957 there were 44.3 million urban and rural-nonfarm households and 5.2 million rural-farm households.

Farm households are more apt to include both husband and wife than are nonfarm households. The farm widow who is unable to hire help or does not have a son old enough to carry on the operations, usually has to give up her farm and the farm widower is likely to marry again if he remains on the farm. Eighty-four percent of rural-farm households had both husband and wife compared with 75 percent for nonfarm households. On the other hand, farm households are less likely than nonfarm to include only one person or only unrelated people living together.

Most of us are aware that the average size of both farm and nonfarm households has been decreasing for a long time (Table 5). The average size of household in rural-farm and urban areas has declined more than households in rural-nonfarm areas. Still, in size, rural-farm households are largest and urban households smallest at the present time. Decreases in average size were particularly sharp between 1940 and 1950, but average size hasn't changed as much since 1950. This was largely due to increased numbers of marriages in the 1940's which created small households. Most of these small households have since become larger with the addition of children.

The number of persons in the total population who are employed at a given time has great significance for spending analyses. Among the trends for various groups in the labor force about which we could talk, perhaps most important for this group to consider are the changes in participation in gainful work of married women. Recent reports of the Bureau of the Census indicates that the long-term upward trend in the labor force participation of married women continued in the first part of 1957, then levelled off in the summer and fall months to about the same rate as in the previous year. During the period between the end of World War II and March 1957, the number of wives working increased at an average of about 500,000 per year. And most of this increase occurred among wives who were living in the same households with their husbands.



Particularly striking has been the increase in the employment of wives who are 35 and more years old. Many of the women have part-time jobs, and many move in and out of the labor force in the course of a year. Nevertheless, the importance of their added income, their contacts with people outside their own circle of friends and relatives, etc. should be considered in analyses of changing expenditure patterns. The phenomenon of increased labor force participation is not limited to any one residence group. Now over one-fourth of the rural wives and nearly one-third of the urban wives with husbands present in their households are working or looking for work.

Age distributions of heads of households or of farm operators are used in various types of analyses because many things about a family can be assumed with a fair degree of certainty if the age of a principal member is known. Farm operators tend to be somewhat older on the average than the heads of other households in the United States. Median age of heads of all households in the U. S. in 1955 was 45 years. According to the Expenditure Survey, the median age of farm operators, most of whom are heads of their households, was about 6 years more - 51 years. Related to the age of the operator is the age of his wife, although we can all cite cases of wide disparity, I am sure. And since men generally marry women younger than themselves, the median age of farm operators' wives as reported in the Survey was some under that of operators. (Table 6).

Knowing what we do about the ages of farm operators and their wives, it is not surprising to find from the Survey results that nearly 10 percent of the farm operators had been married for 41 years or more. And another 25 percent had celebrated anniversaries ranging from the Silver to the Ruby (25 through 40 years).

Among farm-operator families in the Expenditure Survey, about 3 in every 10 had only two members. Most of these are husband and wife units. About half of the families have 3 to 5 members; the modal type being husband, wife, and children units. Less than 2 out of 10 families had 6 or more members, and only a small proportion had only 1 member.

In general, size of household tends to rise as age of head increases through the early forties. After that size tends to decrease as children leave home or with the death of one spouse.

Relatively high correlations between educational level and expenditures have been found in various studies. Therefore some data on educational attainment of farm people is in order. Farm people aged 20 to 24 years in 1955 averaged 10.5 years of school; those of 45 to 49 years of age had 8.5, while the average years of schooling of persons 70 to 74 years of age was only 7.5 years. These figures indicate, in addition to relationship of age and educational attainment, the fact that steady progress has been

233



made over the years in amount of schooling. Improvement among farm operators is indicated by the percentages who have attained the various levels. In spite of the improvement shown, the figures indicate that 62 percent of the farm operators have completed fewer than 9 years of schooling.

We have discussed briefly a variety of changes and trends in population. Perhaps we can have just a quick look now at prospects for future numbers of people and households. Census Bureau projections indicate that the United States will have between 207 and 228 million people in 1975. Projections made for States for 1970 show increases for all except Maine, Vermont, Mississippi, Arkansas, and Oklahoma. Only these five States are likely to have fewer people in 1970 than they had in 1955.

Also from the Bureau of the Census come projections of the total number of households. We may expect by 1975, 61.6 to 67.4 million. How the population and households will be distributed between urban and rural or farm and nonfarm, we cannot say as there are too many uncertainties to warrant making official projections at this time.

#### SOURCE MATERIALS UTILIZED IN THE PREPARATION OF THIS TALK:

##### Bureau of the Census

Current Population Reports, Series P-20, 25, 50, and 57.

United States Censuses of Population: 1940 and 1950.

United States Censuses of Agriculture: 1940, 1950 and 1954.

##### Census-AMS

Farm Population, Series P-27.

##### Census-USDA

Survey of Farmers' Expenditures in 1955.

Farms and Farm People.

Table 1.--Growth in urban and rural population in the United States, 1790-56

Year	Total	Urban <sup>1/</sup>	Rural	Rural nonfarm	Rural farm
	(000)	(Pct.)	(Pct.)	(Pct.)	(Pct.)
1790	3,929	5.1	94.9		
1890	62,948	35.1	64.9		
1910	91,972	45.7	54.3	19.7	34.6
1920	105,711	51.2	48.8	19.1	29.7
1930	122,775	56.2	43.8	19.3	24.5
1940	131,669	56.5	43.5	20.5	23.0
1950(old urban definition)	150,697	59.0	41.0		
1950(new urban definition)	150,697	64.0	36.0		
1957 (October,including Armed Forces overseas)	172,069				

<sup>1/</sup> Estimates for 1790 through 1940 have been adjusted to 1940 Census classification of urban and rural.

Source: United States Bureau of the Census.

Table 2.--Estimated civilian population living on farms, by age and sex,  
April 1950 and 1957

Age	1957			1950		
	Total	Male	Female	Total	Male	Female
	(000)	(000)	(000)	(000)	(000)	(000)
All ages	20,396	10,622	9,774	25,058	13,039	12,019
Under 14 years	6,335	3,334	3,001	7,597	3,969	3,628
14 years and over	14,061	7,288	6,773	17,461	9,070	8,391
14-17 years	1,707	905	802	1,994	1,064	930
18-19 years	610	329	281	820	436	384
20-24 years	953	506	447	1,596	819	777
25-44 years	4,557	2,228	2,329	6,042	2,976	3,066
45-64 years	4,340	2,274	2,066	4,927	2,626	2,301
65 years and over	1,895	1,046	849	2,082	1,149	933

Percentage distribution

All ages	100.0	100.0	100.0	100.0	100.0	100.0
Under 14 years	31.1	31.4	30.7	30.3	30.4	30.2
14 years and over	68.9	68.6	69.3	69.7	69.6	69.8
14-17 years	8.3	8.5	8.2	7.9	8.2	7.7
18-19 years	3.0	3.1	2.9	3.3	3.4	3.2
20-24 years	4.7	4.8	4.6	6.4	6.3	6.5
25-44 years	22.3	21.0	23.8	24.1	22.8	25.5
45-64 years	21.3	21.4	21.1	19.7	20.1	19.1
65 years and over	9.3	9.8	8.7	8.3	8.8	7.8

Figures are rounded to the nearest thousand without being adjusted to group totals.

Source: United States Bureau of the Census and United States Department of Agriculture.

Table 3.--Farm population,  
United States, 1910-57

Year	Number	Percent of total popu- lation
	(000)	(Pct.)
1910	32,077	34.9
1920	31,974	30.1
1930	30,529	24.9
1940	30,547	23.2
1950	25,058	16.6
1957	20,396	12.0

Table 4.--Employment status of the civilian  
population living on farms, April 1957 and 1950

Employment status and industry	Number		Percent	
	1957	1950	1957	1950
	(000)	(000)	(Pct.)	(Pct.)
Total, 14 and over	14,061	17,461	100.0	100.0
Labor force	7,912	9,711	56.3	55.6
Not in labor force	6,149	7,750	43.7	44.4
Labor force	7,912	9,711	100.0	100.0
Employed	7,707	9,479	97.4	97.6
Agriculture	4,815	6,628	60.9	68.3
Nonagricultural industries	2,892	2,851	36.6	29.4
Unemployed	205	232	2.6	2.4

Table 5.--Farm and nonfarm households in the United States, 1920-57

Year	Total	Urban	Rural	Rural nonfarm	Rural farm
	(000)	(000)	(000)	(000)	(000)
1920	24,352	12,803	11,549	4,797	6,751
1930	29,905	17,373	12,532	5,928	6,605
1940	34,855	20,596	14,258	7,151	7,107
1950	43,554	28,625	14,929	8,654	6,275
1957	49,543	32,151	17,392	12,174	5,218

Average population per household

1930	4.11	3.97	3.99	4.57
1940	3.78	3.61	3.78	4.25
1950	3.52	3.39	3.62	4.03
1956	3.39	3.24	3.58	3.81

Figures are rounded to the nearest thousand without being adjusted to group totals.

Source: United States Bureau of the Census, and United States Department of Agriculture.



Table 6.--Selected characteristics of farm operators and their households,  
United States, 1940 (or 1941) and 1955.

Age of operator	:	1940 (Pct.)	:	1955 (Pct.)
Under 35		20		13
35-44		21		24
45-54		25		22
55-64		20		21
65 and over		14		20
Age of operator's wife	:		:	1955
Under 35				23
35-44				27
45-54				22
55-64				19
65 and over				9
Number of years duration of marriage	:		:	1955
Under 11				18
11-20				24
21-30				20
31-40				15
41 and over				10
Not married or not reporting years married				13
Size of operator's economic family 1/	:	1941	:	1955
1 person		4		5
2 persons		23		29
3 persons		20		18
4 persons		21		18
5 persons		13		12
6 or more		19		18
Type of family	:		:	1955
Single persons				5
Husband and wife only				26
Husband, wife, and children under 18, no others				39
Oldest child under 6				6
Oldest child 6-15				25
Oldest child 16-17				8
All other				30
Highest grade of school completed by operator :		1940 2/	:	1955
Under 9 years		76		62
9-12		20		31
13 or more years		4		7

1/ Size of farm operator's economic family; that is, in year-equivalents, the time spent in the household of a group of persons usually related by blood, marriage, or adoption, who pool their resources and the members of which are primarily dependent on common family resources. (Ordinarily, if a person pays board and room, he is not included in the economic family.)

2/ Based on numbers of native white and Negro farm operators only, and does not include operators 65 years old and over. Therefore, the distribution may be distorted slightly.

Source: Data for 1940 from the Sixteenth Censuses of Population or Agriculture. 1941 data come from the Bureau of Labor Statistics, "Family Spending and Saving in Wartime." Data for 1955 are from the Survey of Farmers' Expenditures in 1955 of the Department of Agriculture and the Bureau of the Census. Care should be exercised in the interpretation of these figures and changes indicated since 1940 as they have not been fully appraised at this time.









Statement of Joseph G. Knapp, Administrator, Farmer Cooperative Service, on "Cooperative Marketing," for use in panel discussion on "Effects of Marketing Changes on the Outlook," November 19, 1957.

Farmer marketing cooperatives have a considerable relationship to the subject under discussion this afternoon -- Effects of Marketing Changes on the Outlook. Farmer marketing cooperatives are concerned with the advancement of sound nutritional research; with the lowering of marketing costs; and with the development of domestic and foreign markets for agricultural products.

About one-fourth of all farm products marketed by United States farmers move into distribution channels through cooperative marketing organizations. The 7,098 cooperatives which marketed farm products in 1955 did a volume of business valued at \$7.4 billion. Many of these cooperatives handled production supplies adapted to the specific needs of their members. The total business represented by the 9,660 cooperatives which engaged in either marketing or farm supply operations amounted to \$9.5 billion. In addition, farmers obtained through these cooperatives numerous services related to their marketing operations, such as trucking, storage, orchard and grove care, fertilizer spreading, and similar services. They also obtained from other service-type cooperatives such additional services as insurance, credit, irrigation, electricity, and telephone.

Greater efficiencies achieved through these cooperative marketing and farm supply enterprises resulted in net savings and margins amounting to \$275 million in 1954. The amount of patronage refunds distributed either as cash or as allocated capital credits amounted to \$238 million dollars. Comparing this figure of \$238 million with farmers' investments of \$1.8 billion in their cooperatives indicates that these patronage refunds in cash or revolving fund credits amounted to an average return of about 13 percent on the amount farmers had invested. a1

While these figures provide a tangible measure of the value of cooperatives to farmers in marketing their farm products, they do not tell the whole story.

Farmer cooperatives, in acting as pace setters in their respective commodity fields, help maintain desirable elements of competition. As a result, all farmers receive higher returns for the products they market as well as savings in the production supplies they purchase. It is a fundamental characteristic of farmer cooperatives that information on their marketing methods and costs of operation is generally available. Thus they serve a unique educational role in supplying needed information on the costs of doing business in specific commodity fields. This dissemination of operating information benefits not only cooperative members but many farmers who are not directly affiliated with them.

Many of you, I am sure, are aware that some of our most important nationwide marketing agencies are farmer cooperatives. Their well-known brands have been household words for years. For example, SUNKIST citrus is marketed by Sunkist Growers, DIAMOND walnuts by Diamond Walnut Growers, OCEAN SPRAY cranberries by National Cranberry Association, SUNSWEET prunes by California Prune and Apricot Growers Association, and LAND O'LAKES butter by Land O'Lakes Creameries.

Farmer cooperatives have been pioneers in developing foreign markets for our agricultural products. Their success in this effort is reflected in the high regard foreign buyers have for well-known brands of fresh and processed fruits, nuts, and other products. They have established this favorable position in the foreign market only through careful planning and consistent merchandising. Cooperatives are important handlers of other products that enter into our foreign trade. These include wheat, corn, cotton, tobacco, rice, fats and oils, and oil seeds.



A number of farmer cooperatives have made important contributions to product and marketing research. For example, Sunkist Growers has carried on research for many years on the quality and health values of citrus fruits. Similar research has been done by the California Prune and Apricot Growers Association in marketing Sunsweet prunes. In an effort to improve wheat sales and prices, the Farmers Cooperative Commission Company of Hutchinson, Kansas, is operating an experimental mill and baking laboratory to test wheat qualities for baking. This gives growers a better market by indicating to millers how well the members' wheat will perform for the baker after milling.

Many farmers' associations have cooperated with the Department of Agriculture in its marketing research program and have made available for research uses detailed cost records and other pertinent information. The results of such research have been widely disseminated through publications of this Department, newspapers and periodicals of cooperatives, and trade journals. Producers and consumers in general have been benefited by this research.

A number of cooperatives are currently making a major effort to reduce costs, eliminate inefficiencies, improve management, and reorganize their business operations on a broad scale. Some are effecting such improvements through consolidating and integrating their activities. In doing so, cooperatives are endeavoring to adjust to new conditions so as to fulfill their potential usefulness in helping farmers achieve a better economic position in today's business environment and a more satisfying role in tomorrow's challenging world.



# *The Demand and Price Situation for Forest Products*



FOREST SERVICE AND COMMODITY STABILIZATION SERVICE  
U. S. DEPARTMENT OF AGRICULTURE ... NOVEMBER 1957





## FOREWORD

This report was prepared as background information for the Outlook Conference held by the U. S. Department of Agriculture in November 1957. The analysis of timber products was made by the Division of Forest Economics Research, Forest Service, and the analysis of naval stores by the Tobacco Division, Commodity Stabilization Service.

Much of the information on stumpage and log prices was taken from the comprehensive report "Price Trends and Relationships for Forest Products," published by the Forest Service in the spring of 1957 (29).<sup>1</sup> The brief analysis of the outlook for 1975 is based on assumptions concerning population trends, gross national product, and other related factors contained in a report, "Timber Resource Review," issued in preliminary form by the Forest Service in September 1955 (27). Both reports are available upon request from the U. S. Department of Agriculture, Forest Service, Washington 25, D. C.

---

<sup>1</sup>Numbers in parentheses refer to Literature Cited p. 23.





# The Demand and Price Situation for Forest Products

## OUTLOOK SUMMARY

The volume of industrial roundwood (excluding fuelwood) produced in the United States in 1957 is estimated at 9.2 billion cubic feet. This is about 5 percent less than the peak of about 9.7 billion cubic feet produced in 1956. Sawlogs are expected to account for 59 percent of the roundwood produced in 1957, pulpwood 26 percent, veneer logs 6 percent, and miscellaneous products such as cooperage logs and bolts, mine timbers, and poles and piling the remaining 9 percent.

Stumpage prices in 1957 as indicated by prices received on National Forest timber sales for Douglas-fir, ponderosa pine, southern pine, and sugar pine are near record levels. Stumpage is not a homogeneous commodity and prices received for different timber sales vary considerably with quality, logging and processing costs, and marketing practices and conditions.

Sawlogs.--Sawlog production in the United States in 1957 is estimated at 34.8 billion board-feet lumber tally. This is about 6 percent less than production in 1956 and 10 percent less than production in 1955. The West is expected to account for about 53 percent of the sawlogs produced, the South 34 percent, and the North 13 percent.

The decline of sawlog production since 1955 reflects a drop in residential construction--the most important single use of lumber. Since 1955 nonfarm dwelling units starts have declined 27 percent, falling from 1.3 million in that year to 1.1 million units in 1956, and to an estimated 970 thousand units in 1957. It is generally anticipated that residential construction will increase substantially within a few years as the upsurge in birthrates that started in the early 1940's results in an increase of new families.

Sawlog prices are near an alltime high. Currently Douglas-fir sawlogs delivered at towable waters in western Oregon and western Washington are selling at prices

averaging from about \$67 for grade 1 logs to about \$45 for grade 3 logs--a level somewhat below 1956. On the basis of fragmentary information, prices for other sawlog species in other regions of the country seem to have followed a somewhat similar trend, reaching a peak during 1956 and declining slightly in 1957.

Pulpwood.--Pulpwood production in the United States during 1957 is estimated at 34 million cords. This is about 3 percent less than production in 1956 but 10 percent above the 30.9 million cords produced in 1955. The decrease in pulpwood production in 1957 reflects a decrease in demand for paper and paperboard and marks what is believed to be a temporary reversal in a trend that has been sharply upward for many years.

Softwoods, such as southern pine, western hemlock, Douglas-fir, spruce, and true firs are expected to make up about 83 percent of the pulpwood produced in 1957. It is estimated that about 58 percent of the pulpwood cut in 1957 will come from the South, 22 percent from the West, and the remaining 20 percent from forests in the North.

Pulpwood prices at local points of delivery are now at an alltime peak, at approximately the level prevailing in 1956. In the Southeast, the price of rough pine pulpwood at local point of delivery currently amounts to \$15.30 per cord. This is nearly the same as prices received in 1956 but reflects a modest increase over the \$14.40 per cord received in 1955.

Veneer logs.--The volume of veneer logs produced in the United States in 1957 is estimated at 3.5 billion board-feet, including 2.5 billion board-feet of softwoods and 1 billion board-feet of hardwoods. Total production in 1957 is about 5 percent less than production in 1956, when a peak of 3.7 billion board-feet of veneer logs was produced. The decline in production in 1957

primarily reflects the decrease in demand for softwood plywood resulting from the drop in residential construction.

Currently the price of Douglas-fir veneer logs in western Oregon and western Washington ranges from an average of \$82 per thousand board-feet for number 3 peelers to an average of \$110 per thousand board-feet for number 1 peelers. These prices are somewhat below the levels attained in 1956, the previous peak year.

Prices for hardwood veneer logs are also at or near a peak in 1957, although they show wide ranges in value. Black walnut veneer logs, for example, are being quoted at from \$50 to \$375 per thousand board-feet in Illinois.

Other roundwood timber products.--The production of other industrial roundwood timber products such as cooperage logs, poles and piling, fence posts, hewn ties, round mine timbers, and a miscellaneous assortment of other products amounted to about 700 million cubic feet in 1952. Since then

trends in the production of these products have been variable--some increasing and others decreasing. In total, however, there has apparently not been much change in the level of production. Prices vary widely depending upon the product, species, and region.

Naval stores.--Overall naval stores production is expected to be lower in 1957 with declines in gum and steam-distilled wood naval stores more than offsetting a sizeable increase in tall oil rosin and a slight rise in sulfate wood turpentine. Both domestic consumption and exports of rosin and turpentine are likely to be lower than in 1956. Rosin stocks are expected to be higher by April 1, 1958, as compared with a year ago, mainly because of increased CCC holdings. A slight increase is probable in turpentine stocks this year as compared with 1956.

Prices for turpentine and top rosin grades are expected to rise during the next few months. Not much price change is expected in medium grade rosins.



## THE DEMAND AND PRICE OUTLOOK FOR STUMPAGE

### Production of industrial roundwood near record levels

The volume of industrial roundwood (i.e. all round products except fuelwood) produced in the United States in 1957 is estimated at 9.2 billion cubic feet. This is about 5 percent less than estimated production in 1956, the previous peak year (fig. 1, app. table 1). Sawlogs are expected to account

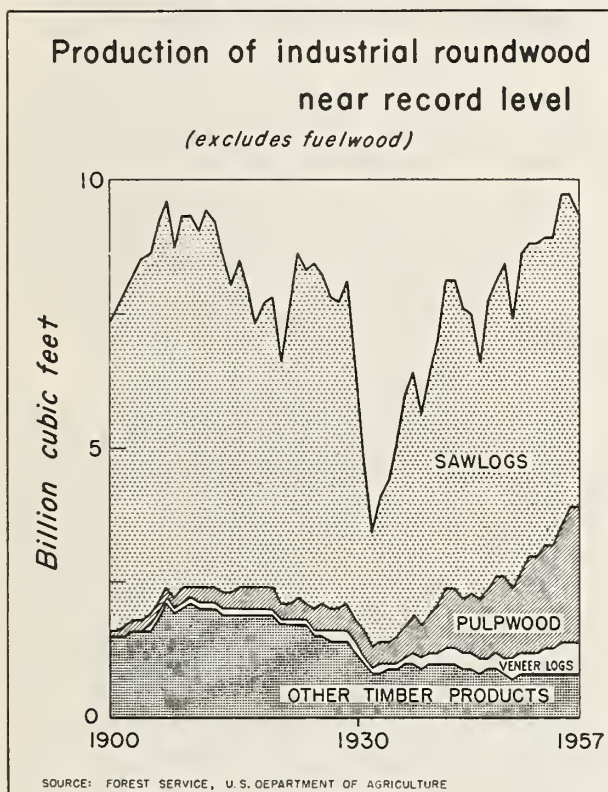


Figure 1

for 59 percent of the roundwood produced in 1957, pulpwood 26 percent, veneer logs 6 percent, and miscellaneous products such as cooperage logs and bolts, mine timbers, and poles and piling the remaining 9 percent.

During the agricultural and industrial expansion of the early 1900's, the volume of industrial roundwood produced reached a level of about 9.6 billion cubic feet in 1907. As a result of the substitution of other materials for industrial timber products, and such factors as advances in the

utilization of raw materials, and improvements in the processing and treatment of timber products, a substantial decrease in production occurred between 1907 and 1930. As production climbed after the 1930's, the volume of industrial roundwood products again increased to a new peak of 9.7 billion cubic feet in 1956. This record level of production reflects a comparatively high rate of lumber consumption, a long-term rapid increase in pulpwood products consumption, and the more recent rapid increase in the consumption of veneer and wood fibre products.

### Stumpage prices near the alltime high

Stumpage prices during the first quarter of 1957, as indicated by the prices received in National Forest sales of Douglas-fir, ponderosa pine, southern pine and sugar pine, are at or near record levels (fig. 2, app. table 2). For example, the

### Stumpage prices increased rapidly after 1940 .. Some species show decline in 1957

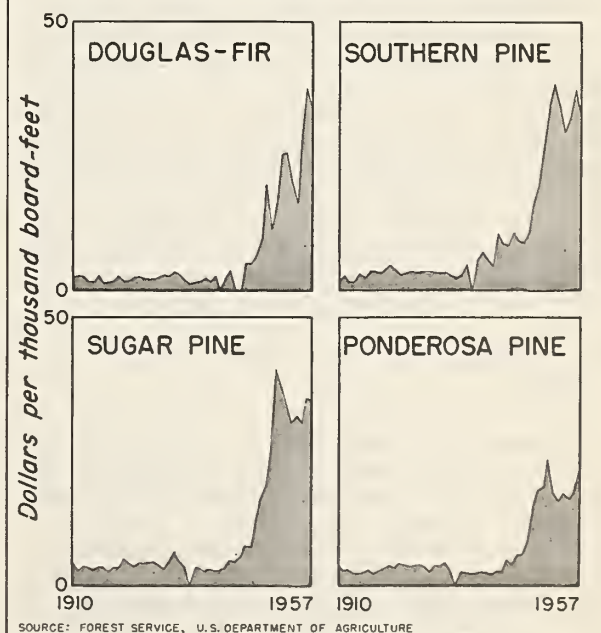


Figure 2



price of Douglas-fir stumpage currently amounts to about \$33.80 per thousand board-feet, about 10 percent below the all-time peak of \$37.70 reached in 1956. The stumpage price of southern pine showed a somewhat similar pattern. On the other hand, stumpage prices for sugar pine showed little change from the 1956 high, and the price of ponderosa pine increased 16 percent to a peak of \$31.60 per thousand board-feet.

The recent softening in stumpage prices for some species is largely attributable to a decrease in demand for roundwood, particularly sawlogs. The volume of roundwood produced has decreased some 4 percent since 1955.

While these prices are based on National Forest timber sales, fragmentary data in a number of regions suggests that prices of comparable private stumpage have followed a similar trend. Studies of private sales in South Carolina, in which timber was marked for cutting by Service foresters, showed that stumpage prices for private sales when adjusted to Scribner rule were much the same as prices for National Forest timber in the same area. (2)

Stumpage prices of public timber, however, do not necessarily indicate prices for private timber, since much of the public timber sold is old growth, and public stumpage sales are often affected by conditions that may not be required in private stumpage sales. For example, a purchaser of National Forest stumpage may be required to dispose of logging slash, to cut snags as a fire-prevention measure, or to make certain stand improvements such as removing cull trees and thinning dense stands.

#### Stumpage prices before 1940 relatively stable

Between 1910 and 1940, stumpage prices of Douglas-fir, southern pine, sugar pine, and ponderosa pine were relatively stable, generally ranging from \$2 to \$5 per thousand and board-feet. Adjusted prices, derived by dividing actual prices by the BLS wholesale commodity price index, showed about the same general trend. The relatively stable stumpage prices prior to 1940 were the result of a number of factors. For many years timber was so plentiful in relation to

demand that it had little value. This, along with decreasing demand and forced liquidation that resulted from the pressure of carrying charges on borrowed funds used to purchase land and timber, explains in part why stumpage prices showed little change prior to the 1940's. Higher logging and processing costs, reflecting a decline in timber quality and greater inaccessibility, also tended to depress stumpage prices during this period.

#### Stumpage prices increased rapidly after 1940

Since 1940, stumpage prices have increased rapidly. Southern pine stumpage prices, for example, increased from an average of \$4.50 per thousand board-feet in 1940 to \$37.40 in 1956. Douglas-fir stumpage in this same period, increased even more rapidly rising from \$2.30 to \$37.70 per thousand board-feet, and other species showed somewhat similar increases.

The increase in stumpage prices after 1940 was influenced by a number of factors, but primarily reflects changing conditions of supply and demand. Inflation following World War II had an appreciable effect, but when prices are deflated or adjusted to a constant-dollar basis by dividing actual stumpage prices by the all commodity wholesale price index, the rise in prices was still large. The rapidly increasing demand for industrial timber products during the post war period tended to emphasize stumpage scarcity, particularly for high-quality timber. This, along with expectations of substantially higher potential demands in the future, led to competition for timber resources and to considerable acquisition of forest land for forestry purposes, with consequent increases in land and stumpage prices.

Despite the rapid increases in stumpage prices since 1940, there has been some depressing price factors. Timber quality and volumes per acre have continued to decline, and in the West it has been necessary to log remote areas in rough terrain. The resulting increases in logging and processing costs have to some extent held down the price of stumpage.

### Stumpage prices for individual sales vary widely

Stumpage is not a homogeneous commodity, and prices received for different timber sales vary considerably with species, quality, availability in relation to demand, logging and processing costs, and marketing practices and conditions.

With respect to species, Douglas-fir which produces strong and durable construction lumber commands a higher price than western hemlock and most true firs whose wood is lighter, weaker, and less durable (fig. 3). Part of the price differential between species, however, may reflect tree

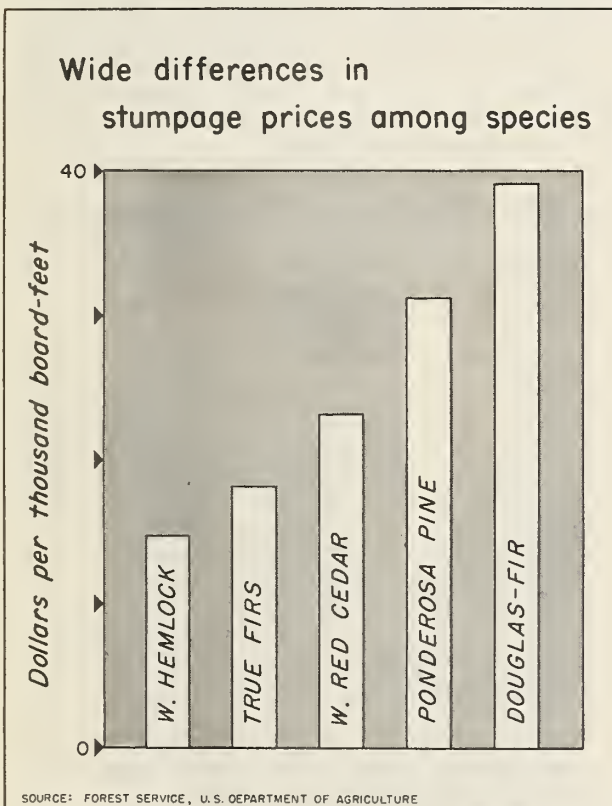


Figure 3

quality, proportion of defect, relative abundance, and logging costs.

For any given species, stumpage prices for individual sales may differ considerably from the average for that species (fig. 4). Such differences in part reflect tree quality. For example, an analysis of the prices of the individual sales shown

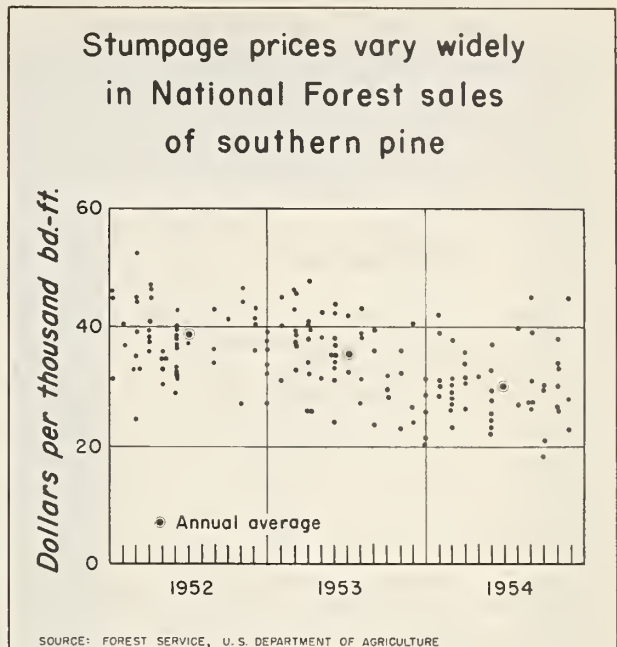


Figure 4

in figure 4 indicated a strong correlation between stumpage prices and the size and quality of trees sold (3). Although bidders did not ordinarily arrive at bid prices for a given sale by means of precise estimates of volume by quality classes, they did recognize the better quality stands and were willing to pay higher prices for them.

Differences in stumpage prices in part reflect the utility of the trees in the various uses to which they can be put. In the period 1935-57, for example, the price of National Forest southern pine sawlog stumpage was about 4 times the price of pulpwood stumpage (fig. 5, app. tables 2 and 3). In general prices for trees containing veneer logs are higher than for sawlog trees. On the other hand, stumpage prices are extremely low for fuelwood and distillation wood, which is usually taken from the huge reservoir of timber too small or too poor in quality for other uses.

Stumpage prices also tend to approximate the residual left after logging and processing costs are deducted from the anticipated selling price of lumber or other processed items. Hence where heavy costs are involved in logging remote areas, rough terrain or scattered stands, stumpage prices tend to be low. Other factors such



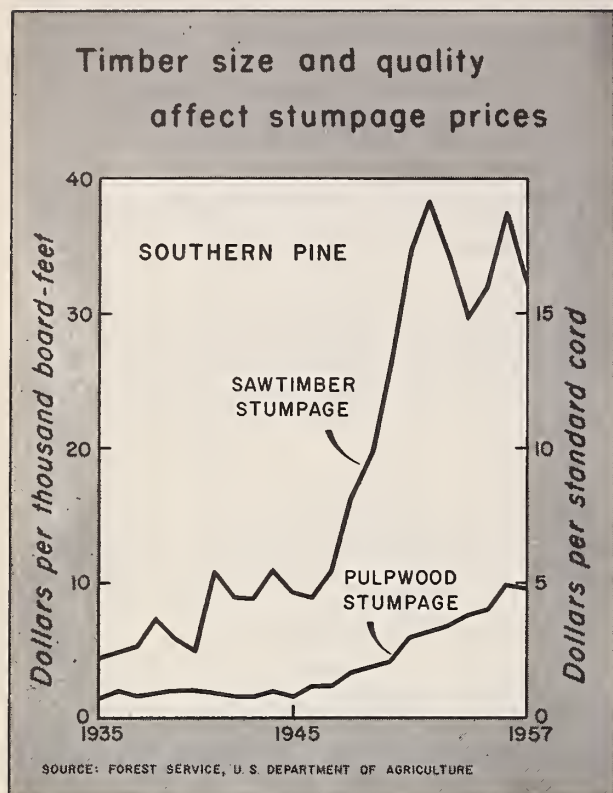


Figure 5

as degree of competition existing for stumpage are often of major importance. In single-bid transactions, for example, stumpage prices tend to be lower than for multibid sales (1, 11, 16, 19). Urgency on the part of the purchaser to buy or the seller to sell; conditions imposed upon buyers to cut selectively or to remove a certain number of defective trees per acre; the size, length and timing of sales; local market conditions, and the degree of interest and knowledge on the part of timber sellers and buyers affect stumpage prices. The use of different log rules and scaling practices also cause variations in volume which affect the unit-sale prices received (7). In actual practice, however, buyers and sellers tend to set prices according to the scale used so that a price approaching true value is usually realized.

#### Current price information on sales of private stumpage fragmentary

At the present time, data on private stumpage sale prices are available in only seven States that publish at varying inter-

vals reports containing information on stumpage (4, 5, 14, 22, 23, 24, 26). The degree of detail in these reports varies from State to State. In general, the reports are based on timber buyers quotations, and are usually presented as a range of prices per thousand board-feet and/or average prices without specifications as to grade, log rule, other value factors and sampling accuracy. Such sales prices reported by purchasers are often considerably above the actual prices received. This is well illustrated in a study made in North Carolina in 1950 where in a sample of 34 timber sales, purchasers reported \$18.96 per thousand board-feet for an estimated 6.8 million board-feet of stumpage (20). A stump survey to determine the volume of timber harvested showed that 9.1 million board-feet had been cut. Actual sales prices realized by owners thus averaged only 75 percent of the reported price or \$14.15 per thousand board-feet.

Species:	State and source	Price of stumpage per thousand bd.-ft.
Ponderosa and sugar pine	California (22) (Sierra region)	<sup>1</sup> \$11.99
Douglas-fir	California (22) (Sierra region)	<sup>1</sup> 7.82
Southern pine:	Louisiana (5)	
Sawlogs		30.00 - 40.00
Pulpwood		<sup>2</sup> 8.20
Gums	Louisiana (5)	8.00 - 12.00
White oak	Illinois (4)	<sup>3</sup> 20.00 - 100.00
Hard maple	Wisconsin (26)	25.00 - 40.00
Yellow birch	Wisconsin (26)	30.00 - 60.00

<sup>1</sup> Average prices for young growth.

<sup>2</sup> Per cord.

<sup>3</sup> Commercial veneer stumpage.

#### Present stumpage price quotations need improvement

Roughly half of the timber cut each year is purchased as stumpage from a part of the 4.5 million farm and miscellaneous small private forest ownerships. Stumpage prices to be directly useful in marketing this timber must be based on actual sales data in which species composition, volume of sales, quality, accessibility, and other factors which significantly affect the prices are identified in a standard objective fashion. It is essential that measurements be on a clearly specified basis and that data be obtained from a sampling procedure that results in representative



prices. Better stumpage-price quotations, also require standardized quality grades for logs and trees, and more accurate procedures for identifying and classifying the several factors that affect price.

### THE DEMAND AND PRICE OUTLOOK FOR SAWLOGS

#### Decline in sawlog production in 1956 and 1957

The volume of sawlogs produced in the United States in 1957, as measured by lumber production, is estimated at 34.8 billion board-feet. This is about 6 percent less than production in 1956, 10 percent less than production in 1955, and 24 percent below the peak of 46 billion board-feet reached in 1907 (fig. 6, app. table 4).

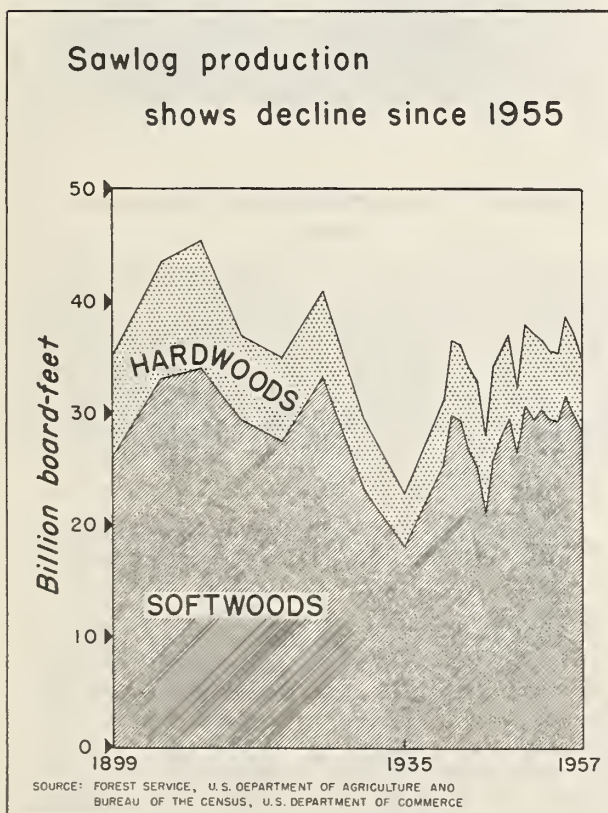


Figure 6

The volume of sawlogs produced is dependent upon the demand for lumber, because domestic sawlog production accounts for most of the lumber consumed in the United States. In the period 1953 through

1957, for example, estimated domestic lumber production averaged 36.8 billion board-feet compared with average imports of 3.1 billion board-feet and average exports of 0.8 billion board-feet. Softwood lumber from Canada has made up most of the lumber imports. Hardwood lumber from tropical countries, while highly important for some special uses, accounted for only a small part of lumber imports.

While the present level of lumber consumption (and sawlog production) is not far below the alltime peak reached in the early 1900's, there has been a decided decline in per capita consumption. Per capita consumption of lumber fell from a peak of 527 board-feet in 1906 to 260 board-feet in 1940. This downward trend was caused largely by the substitution of other materials, including plywood and paperboard for lumber. Since 1939 lumber consumed per person has averaged around 250 board feet per capita. During this period the substitution of other materials for lumber in certain uses has continued, but the substitution has been offset by increased demands for lumber in residential construction and for other uses.

#### Recent decline in sawlog production reflects drop in residential construction

The decline in sawlog production since 1955 reflects a drop in residential construction--the most important single use of lumber (fig. 7). In 1952 an estimated 16.6 million board-feet or 40 percent of all the lumber consumed in the United States was used in the construction, maintenance, and repair of residential buildings. Since 1955, nonfarm dwelling unit starts have declined 27 percent, falling from 1.3 million in that year to 1.1 million units in 1956 and to an estimated 970 thousand units in 1957 (fig. 8). Nonfarm starts in 1957 are 31 percent below the record of 1.4 million units started in 1950--the peak year of residential construction.

Over the next few years, residential construction may not rise appreciably above the current level in view of the present low rate of family formation, which reflects the low birthrates that prevailed during the 1930's. It is generally anticipated, however, that residential construction will increase substantially within a few

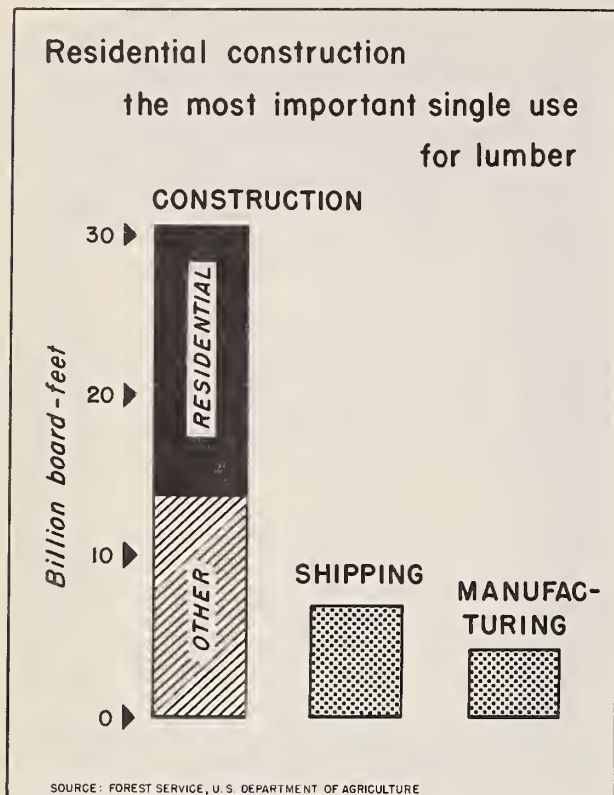


Figure 7

years as the upsurge in birthrates that started in the early 1940's results in increased formation of new families. In the interim, the level of residential construction may be maintained by movement of city population to suburbs, by current high birthrates which present a need for larger houses, and by anticipated increases in disposable income that will permit improvement in the general level of housing. Government policy to provide liberal credit and otherwise encourage construction is also likely to be an important factor.

During 1952 lumber consumption in non-residential construction amounted to 13.7 billion board feet and accounted for 33 percent of total lumber consumption. Over half of this volume was used in construction of industrial, commercial, institutional, recreation, military and public utilities, and the remainder was used on farms, railroads, and mines.

Increases in nonresidential construction in 1957 have partially offset the decline in residential construction and helped sus-

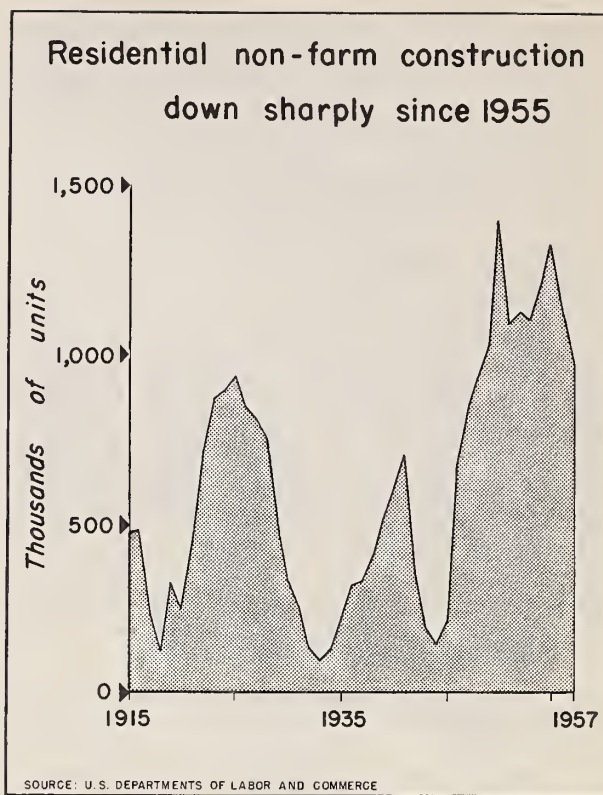


Figure 8

tain the demand for construction lumber. In 1957, nonresidential activity is at a record level with the seasonably adjusted annual rate estimated at 30.6 billion dollars (22.8 billion in 1947-49 dollars)--9 percent and 20 percent respectively, above the level of nonresidential construction in 1956 and 1955 (fig. 9).

Consumption of lumber in the shipment of agricultural and industrial commodities in 1952 amounted to about 6.9 billion board-feet. About 4.2 billion board-feet or 10 percent of all the lumber used in 1952 was consumed in fabricated production. Consumption for these purposes has shown little change in recent years. The demand for shipping materials has increased significantly in response to higher levels of economic activity, but lumber has had strong competition from container board and other shipping materials. Industrial production has also increased, but the substitution of other materials for lumber has tended to hold down lumber consumption for fabricated products. Softwoods have constituted about 80 percent



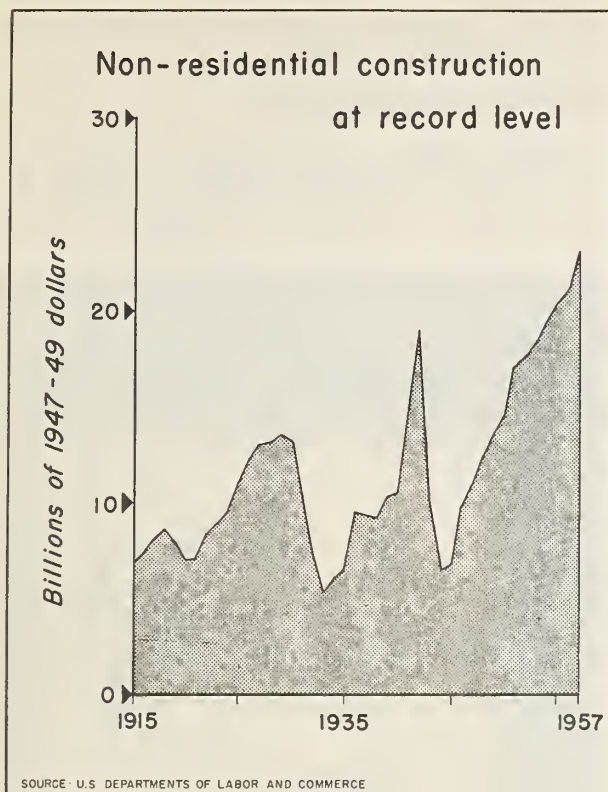


Figure 9

of all the lumber used in the United States. There is, however, a considerable difference between the use of softwood and hardwood lumber by major end uses. In general, softwood lumber is preferred for construction purposes and hardwood lumber for manufactured products. There are some fields of use in which either hardwood or softwood lumber can be utilized.

#### More than half the sawlogs produced now cut in the West

Sawlog production as measured by lumber production is concentrated in the West.<sup>2</sup> Lumber production in the West has increased from 3.5 billion board-feet in 1900 to an estimated 18.4 billion board-feet in 1957 (fig. 10, app. table 5). The present western cut accounts for more than half of all the lumber produced in the United States and includes about two-thirds of softwood lumber.

<sup>2</sup> The West includes the 11 Western States and South Dakota. The South consists of the 12 most Southern States, including Virginia. The North includes the remaining 25 States.

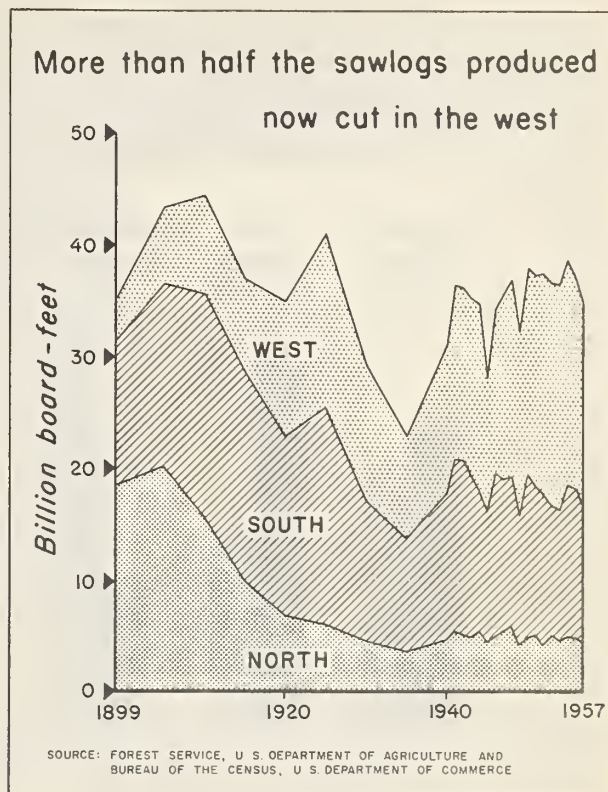


Figure 10

The West is expected to continue to be the most important region in lumber production for some time to come, because of its relatively great wealth of timber (fig. 11). All together, this region contains about 1,345 billion board-feet of sawtimber or two-thirds of the Nation's total supply. In terms of softwoods, the West is in an even better position with 80 percent of the country's softwood volume. Moreover, most of this timber is old growth sawtimber of relatively high quality. Commercial forest lands in the West, however, make up only 24 percent of the Nation's timber-growing acreage.

Sawlog production in the South declined from a peak of 20 billion board-feet in 1910 to 13.3 billion in 1940. Since 1940, there has been no marked trend in lumber production in that region although the estimated production of 11.8 billion board-feet in 1957 is below the average for the period. Softwood lumber cut has declined slightly in relative importance, however, while hardwood lumber has increased.



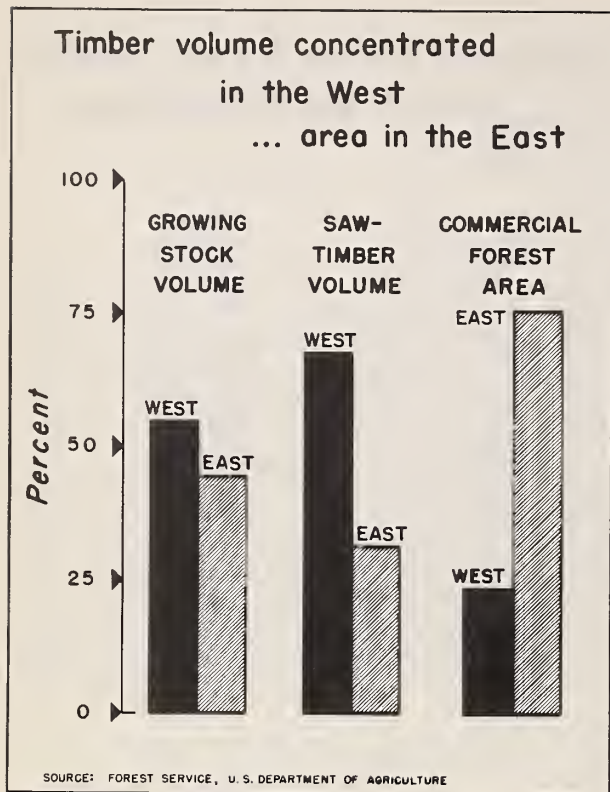


Figure 11

The South contains about 40 percent of the Nation's forest land, 22 percent of the Nation's growing stock, and 17 percent of the sawtimber. Growth rates are high, logging conditions are relatively easy, year-round woods employment is possible, and labor supplies are relatively abundant. Market location is also highly favorable, because distances to the great industrial centers in the North and Midwest are relatively short.

Fifty years ago the North provided half of the lumber produced in the United States, but after the peak production of 20.1 billion board-feet in 1905, lumber production declined to less than 4 billion board-feet in the 1930's. The estimate of 4.6 billion board-feet of lumber produced in 1957 is slightly below the average for the past 15 years.

The North contains 36 percent of the Nation's commercial forest land, 22 percent of the growing stock and 13 percent of the sawtimber, mainly hardwoods. Timber growth in 1952 exceeded cut, but average

timber quality is low and growth is far below potential yields.

#### Sawlog prices near peak

Sawlog prices as indicated by the prices received at towable waters in western Washington and western Oregon are near the alltime peak (fig. 12, table 6). Cur-

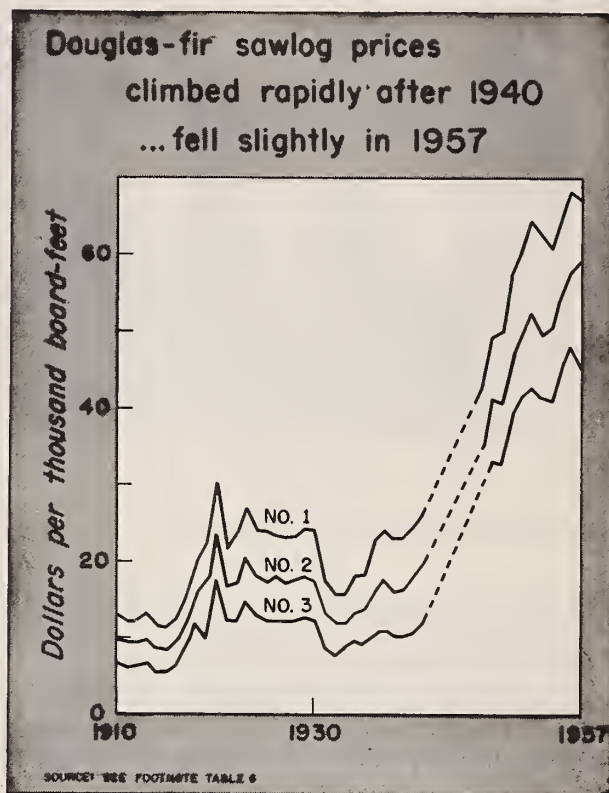


Figure 12

rently, Douglas-fir sawlogs in this area are selling at prices averaging from \$45 for grade 3 logs to \$67 for grade 1 logs. This is somewhat below the prices received in 1956, but above the prices received in 1955.

Since the only important log market in the United States is located in western Washington and western Oregon, comparable price data for sawlogs in other regions are not available. On the basis of fragmentary information, however, it is believed that prices of other sawlog species have followed a somewhat similar trend reaching a peak during 1956 and declining slightly in 1957.

In general, the price of sawlogs follows the price of lumber. The wholesale price index of lumber (1947-49 = 100) reached a peak of 130.6 in April of 1956 (30). Since then prices have declined steadily, falling to 119.6 in August 1957. The present level of lumber prices is about the same as the level in 1952.

Since 1940 Douglas-fir sawlog prices have increased sharply both in current and in adjusted dollar terms. This increase was more rapid than the increase in stumpage prices but approximately the same as for lumber (fig. 13).<sup>3</sup> Increased wage rates in logging camps had some effect on increased log prices, but this was at least in part offset by greater mechanization of logging operations that tended to increase efficiency and hold down costs.

#### Sawlog prices vary with quality

The price of sawlogs varies with quality as measured by log size and freedom from knots, decay, and other defects (fig. 12, app. table 6). Currently, for example, grade 1 Douglas-fir sawlogs on towable waters in western Oregon and western Washington average about \$67 per thousand board-feet while grade 3 sawlogs average about \$45 per thousand board-feet. To an increasing degree, the finest quality Douglas-fir logs are moving into veneer plants, and most of the better logs are no longer available to sawmills.

#### Sawlog price data generally inadequate

As with stumpage, current price information on sales of sawlogs is fragmentary. Current prices, based upon standard grading rules applied by scaling bureaus, are pub-

<sup>3</sup> The price data in this chart are plotted on a logarithmic scale. This is a convenient device for showing comparative rates of change in prices, because equal vertical distances denote equal percentage change.

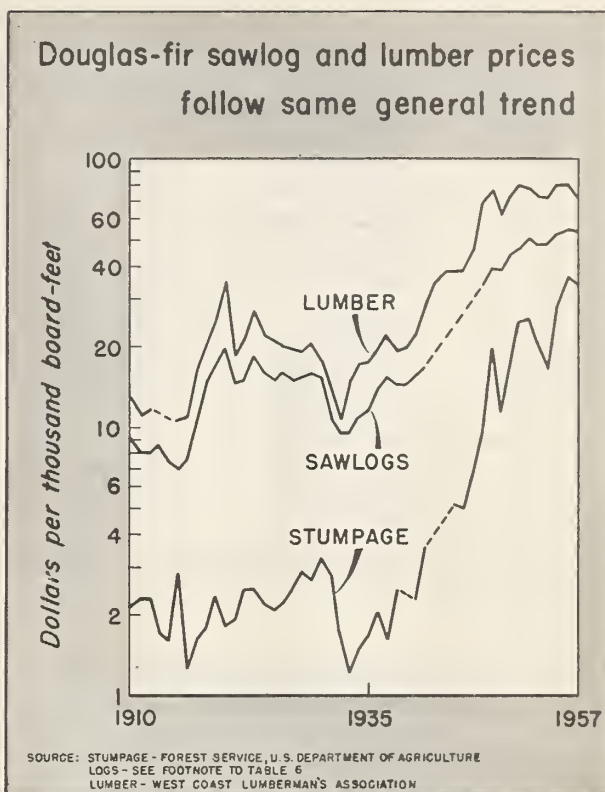


Figure 13

lished in trade publications for the western Washington and western Oregon area (6, 17). In other parts of the West and in the East, local grading rules of varying complexity and accuracy are in use. At the present time in these areas, sawlog price data based on local scales and grading systems are published by several States (4, 5, 9, 10, 13, 14, 22, 26). In general, the prices in these reports consist of mill-spot quotations without specifying grade, log rule, or other value factors.

Illustrative sawlog prices for various species, taken from the State reports issued in 1957, are shown in the following tabulation:



Species:	State and source	Price of sawlogs per thousand bd.-ft.
Ponderosa and sugar pine	California (22) (Sierra region)	<sup>1</sup> \$34.49
Ponderosa pine	NE Washington (14)	30.00 - 45.00
Douglas-fir	California (22) (Sierra region)	<sup>1</sup> 31.19
Douglas-fir	Oregon (10) (Central Willamette Valley)	<sup>2</sup> 45.00
Southern pine	Louisiana (5)	52.20
Gums	Louisiana (5)	36.65
White oak	Illinois (4)	20.00 - 100.00
Hard maple	Wisconsin (26)	65.00 - 100.00
Yellow birch	Wisconsin (26)	75.00 - 170.00
Southern pine	North Carolina (9) (Coastal Plain)	<sup>3</sup> 50.00 - 55.00
Yellow-poplar	North Carolina (9) (Coastal Plain)	20.00 - 50.00
Pine	Vermont (25) (Northwestern)	<sup>4</sup> 47.00

<sup>1</sup> Average price of second-growth sawlogs delivered to mills.

<sup>2</sup> Camp run second-growth Douglas-fir sawlogs.

<sup>3</sup> Doyle rule.

<sup>4</sup> Woods run.

## THE DEMAND AND PRICE OUTLOOK FOR PULPWOOD

### Pulpwood production near peak

Pulpwood production in the United States during 1957 is estimated at 34 million cords, including about 3.5 million cords of residues (fig. 14, app. table 7). This is about 3 percent less than production in 1956, but 10 percent above the 30.9 million cords produced in 1955.

Imports of pulpwood from Canada in 1957 are estimated at 1.6 million cords and additions to stocks during the year 0.6 million cords. Pulpwood consumption in 1957 will thus amount to about 35 million cords, or 2 percent below the peak of 35.8 million cords consumed in 1956. In addition, it is anticipated that the equivalent of 9 million cords of pulpwood will be imported in the form of wood pulp, newsprint, and other paper and paperboard.

The present decline in pulpwood production marks what is believed to be a temporary reversal in the trend that has been almost steadily upward. Since 1900, in response to the development of new uses for pulp and paper products and the continued growth of population and gross national product, pulpwood production in the United States increased from 1.6 million cords to a peak of 35.2 million cords in 1956.

## Pulpwood production has been rising rapidly

...small decline in 1957

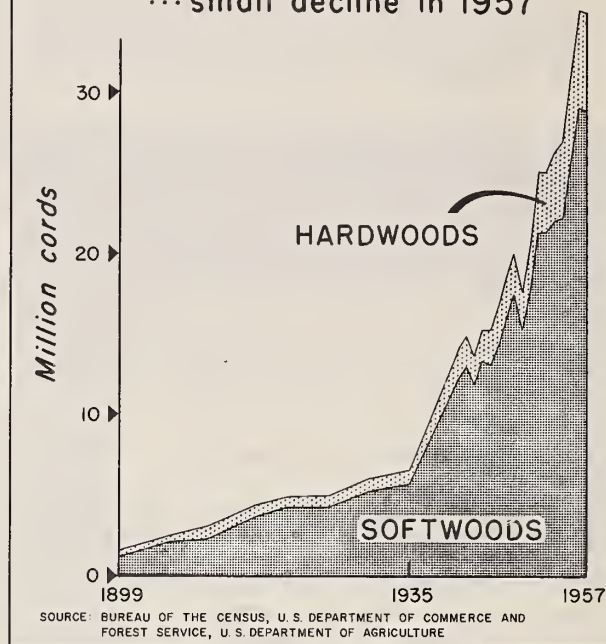


Figure 14

### Softwoods preferred for pulpwood

Softwoods, chiefly southern pine, western hemlock, Douglas-fir, spruce, and true firs, are expected to make up about 83 percent of the pulpwood produced in 1957. In the South, softwoods comprise about 86 percent of the total cut, in the North 56 percent, and in the West almost 100 percent of the total. Softwoods are preferred over hardwoods for many grades of paper and board because of longer fibre lengths and greater strength for pulp and paper.

Although the proportion of hardwood pulpwood to softwood pulpwood has not changed appreciably for many years, hardwood pulpwood production has climbed from about 0.8 million cords in 1920 to an estimated 5.8 million cords in 1957. The production of hardwoods--chiefly aspen and gums--has been expanding primarily as a result of increased competition for wood, higher prices for softwood timber, and the development of suitable pulping processes. This has been particularly true in the North where the stands of preferred spruce and



fir have not been adequate to meet the needs of the pulp industry and where large supplies of relatively low-cost aspen and other hardwoods are available.

### Pulpwood production concentrated in the South

It is estimated that about 58 percent of the pulpwood produced in the United States in 1957 will be cut from forests in the South (fig. 15). Pulpwood production in this

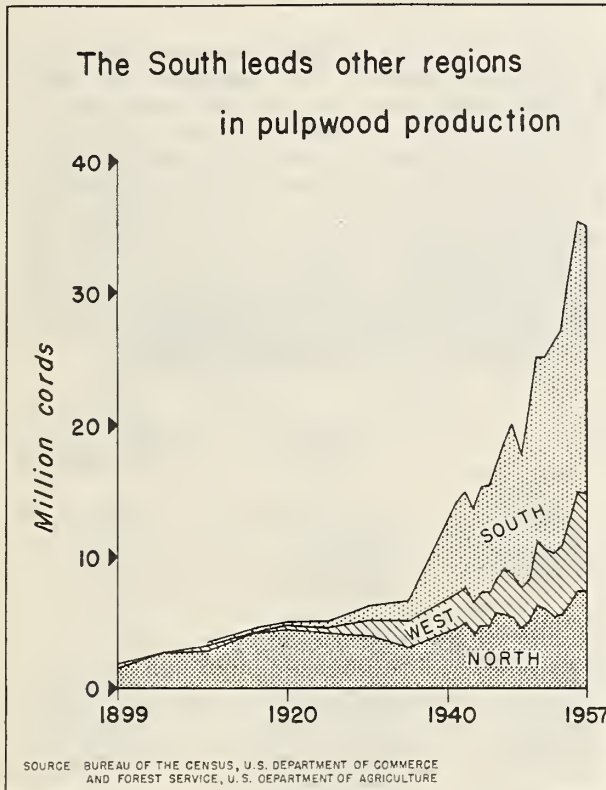


Figure 15

region has been increasing rapidly, rising from about 1 million cords in 1930 to the estimated 19.6 million cords in 1957. The present cut of pulpwood in the South is equivalent to about 80 percent of the volume of sawlogs produced in that region.

The rapid growth of the pulp and paper industry in the South is based upon a number of favorable factors. These include good location with respect to markets; reasonable security of supplies of future raw material, based upon rapid tree growth; local supplies of labor and yearlong woods

work; comparatively easy logging conditions; availability of water, chemicals, and power, and excellent transportation facilities for both pulpwood and finished products.

As a result of the rapid expansion in this region, considerable competition has developed in many areas between pulp mills and sawmills for the available supply of softwood timber. To an increasing extent, the same size and species of timber are used for sawlogs and pulpwood. Yet further expansion of the southern pulp industry is to be expected because of such factors as strong bargaining power for available wood supplies and the ability to use small-size and low-grade material. Some future expansion will probably be based upon the large quantities of plant residues that are available for pulp manufacture.

In the West, new plants have been built and the capacity of old plants increased to such an extent that pulpwood production rose from about 1.2 million cords in 1930 to an estimated 7.4 million cords in 1957. The use of plant residues for pulping is particularly important in this region; currently, more than one-third of the wood used in pulping consists of residues from saw and veneer mills. Although the proportion of residues used in pulping has been steadily increasing, further expansion is expected in view of the large quantities of waste material still unutilized.

Fifty years ago the North supplied nearly all of the pulpwood produced in the United States, and as late as the early 1930's supplied more than half of the Nation's cut. Since the 1930's, production in this region has been rising slowly, reflecting in part the shortages of preferred softwoods. However, in recent years, the production of semichemical and other pulps based on hardwoods has increased substantially, and further expansion can be expected because of the large hardwood resources in this area.

### Pulpwood prices at a peak

Pulpwood prices at local points of delivery are now at a peak, although not much change has occurred since 1956 (fig. 16, app. table 8). In the Southeast, for example, the price

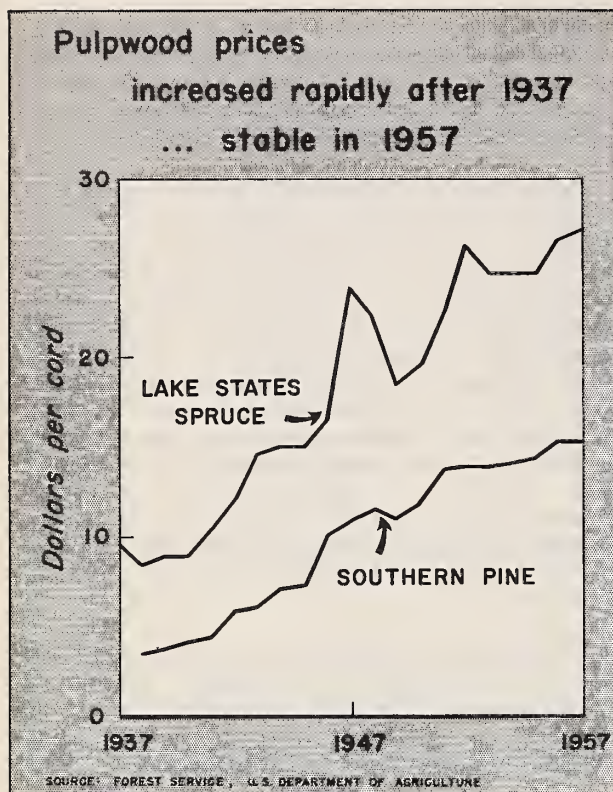


Figure 16

of rough pine pulpwood at local points of delivery currently amounts to \$15.30 per cord. This is approximately the price received in 1956, but reflects a modest increase over the \$14.40 per cord paid in 1955.

Since 1940 pulpwood prices have increased substantially. Prices for spruce in the Lake States have increased from \$9 to \$27.25 per cord. Southern pine pulpwood prices in the Southeastern States have showed an even more rapid increase, rising from \$4.20 in 1940 to \$15.30 per cord in 1957. The trend in the adjusted prices of pulpwood for both spruce and southern pine derived by dividing actual prices by the wholesale price index of all commodities was about the same as the unadjusted price trend.

The rise in pulpwood prices in recent years reflects in part a rapid growth in demand for wood resulting from expansion of the pulp and paper industry. In some areas, however, the increasing scarcity of preferred species, such as spruce and fir, have contributed to the price rise.

Pulpwood prices show considerable variation between regions, depending upon species, availability of local timber supplies, and other factors. Thus, in the Lake States prices of rough pulpwood f.o.b. cars currently average about \$27 per cord for spruce, \$17 for pine and \$12 for aspen and northern hardwood. In the Northeast, prices f.o.b. car average about \$20 per rough cord for spruce and fir and \$14.50 for white pine. In the South the prices per rough cord f.o.b. car average about \$15 for pine and \$12.50 for hardwoods.

Several States publish reports containing price information for pulpwood at local points of delivery. In general, since one unit of measure (the cord) is more or less in standard use and prices are usually at local points of delivery, these price reports are fairly representative of the prices received for pulpwood and are a good indicator of current prices paid. Illustrative pulpwood prices taken from the State reports issued in 1957 for various pulpwood species are shown in the tabulation below:

Species:	State and source	Price of rough pulpwood per cord
White fir and hemlock	N. E. Washington (14)	\$12.00
Southern pine	Louisiana (5)	14.50
Hardwoods	Louisiana (5)	12.20
Spruce and fir	Vermont (25)	17.00
	(Northwestern)	
Aspen	Vermont (25)	10.00
	(Northwestern)	
Aspen	Wisconsin (26)	11.00 - 15.00
Balsam fir	Wisconsin (26)	21.00 - 23.50
Spruce	Wisconsin (26)	26.00 - 28.50
Hemlock	Wisconsin (26)	18.00 - 19.50
Southern pine	North Carolina (9)	13.50 - 14.75
	(Coastal Plain)	
Hardwoods	North Carolina (9)	13.00
	(Coastal Plain)	

## THE DEMAND AND PRICE OUTLOOK FOR VENEER LOGS

### Veneer log production declines in 1957

The volume of veneer logs produced in the United States in 1957 is estimated at 3.5 billion board-feet, including 2.5 billion board-feet of softwoods and 1 billion board-feet of hardwoods (fig. 17). Total production in 1957 is about 5 percent less than production in 1956 when a peak of 3.7 billion board-feet of veneer logs was produced.



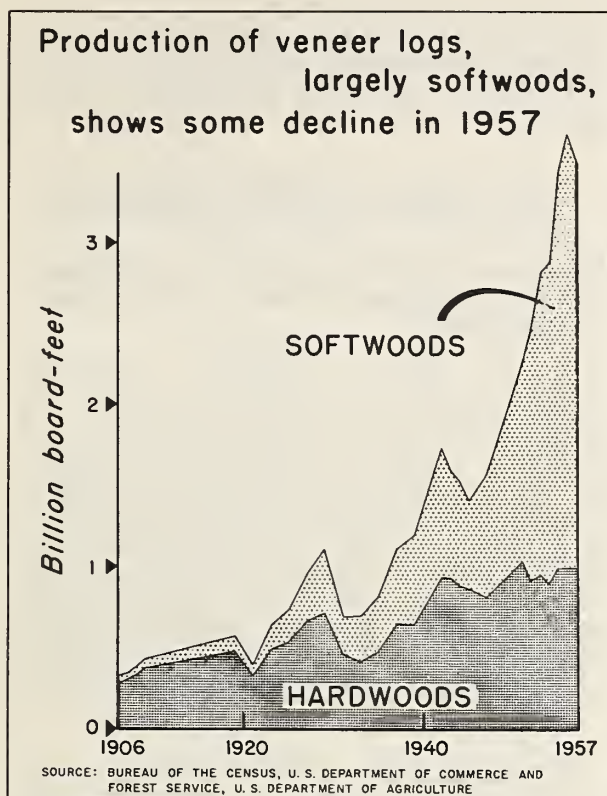


Figure 17

The decline in production in 1957 primarily reflects the decrease in the demand for softwood plywood resulting from the drop in residential construction.

The softwood veneer and plywood industry embraces about 120 mills located in the Pacific Northwest and California. Production has been based chiefly on Douglas-fir which has represented from 95 to 98 percent of the wood consumed. The hardwood veneer and plywood industry, on the other hand, embraces about 500 mills located in the East and depends upon gum, birch, yellow-poplar, and a wide variety of other hardwood species for raw material.

The volume of softwood logs produced in the United States increased slowly between 1900 and the late 1930's. After 1937, however, production climbed rapidly from 460 million board-feet in that year to the 1956 peak of 2.7 billion board-feet. The rapid increase in production of softwood veneer logs in recent years can be attributed to expanding uses for softwood plywood. Substitution of softwood plywood for lumber, particularly in sheathing and subflooring,

has advanced rapidly. Part of the increase in the use of softwood plywood, however, must be attributed to the development of moisture resistant and waterproof glues that permit the manufacture of exterior grades of plywood for use in exposed locations without risk of glue failure.

The increase in the production of hardwood veneer logs was fairly steady from 1906 to 1942. Since 1942 there has been little change in the volume of domestic veneer logs produced, although the demand for hardwood plywood has continued to increase. Such increases have been met by imports of hardwood plywood and veneer, primarily from Japan and Canada respectively.

#### Veneer log prices near record level

Currently, the price of Douglas-fir veneer logs in western Oregon and western Washington ranges from an average of \$82 per thousand board-feet for number 3 peelers to an average of \$110 for number 1 peelers (fig. 18, app. table 6). These current prices

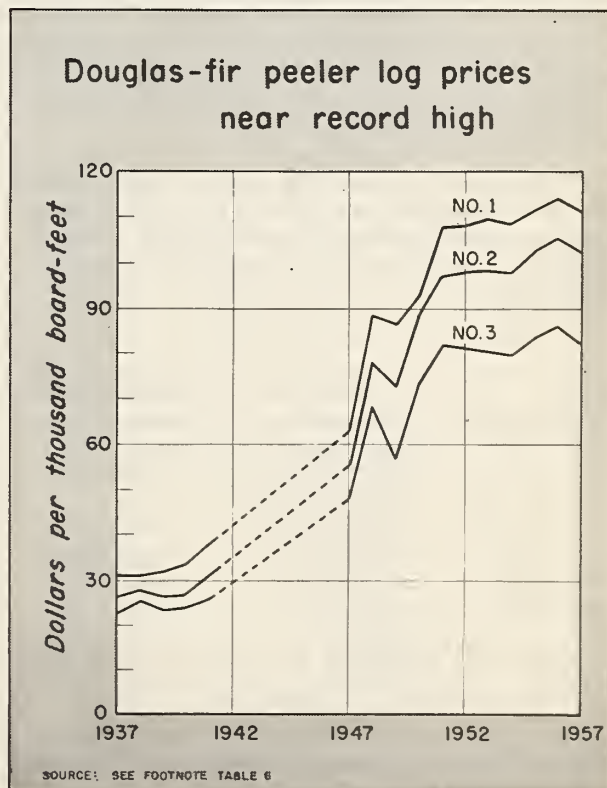


Figure 18



are somewhat below the levels attained in 1956, the previous peak year, but are substantially higher than the prices received in 1940. Between 1940 and 1957, the average price of number 1 peeler logs increased from \$34 to \$110 per thousand board-feet.

The large price increase for Douglas-fir veneer logs since 1940 reflects in part the spectacular growth of the softwood plywood industry and the consequent increased demands for high-grade logs. Rising log production costs and a gradual decline in the availability of high-quality old growth timber have contributed to the price rise. As a result of price increases and technological improvements in the manufacture of plywood, more and more lower grade softwood logs are being utilized.

Prices for hardwood veneer logs are also at or near an alltime peak in 1957, although they show wide ranges in value. High-grade logs suitable for face veneer, used in furniture and paneling, are relatively scarce and bring comparatively higher prices. Black walnut veneer logs, for example, are being quoted from \$50 to \$375 per thousand board-feet in Illinois (4). Veneer logs of species and grade used in the manufacture of veneer for baskets, berry boxes, and other containers are being quoted at lower prices.

Illustrative veneer log prices taken from the State reports issued in 1957 for various species and grades of veneer logs at local points of delivery are shown in the tabulation below:

Species:	State and source	Price of veneer logs per thousand bd.-ft.
Ponderosa pine	California (22) (Sierra region)	\$65.00 - 105.00
Douglas-fir	Oregon (10) (Corvallis area)	68.00 - 105.00
Yellow-poplar	North Carolina (9) (Coastal Plain)	35.00 - 130.00
Hard maple	Wisconsin (26)	85.00 - 120.00
Yellow birch	Wisconsin (26)	140.00 - 225.00
Basswood	Vermont (25) (Eastern)	20.00 - 100.00
Walnut	Illinois (4)	50.00 - 375.00
White oak	Illinois (4)	40.00 - 200.00

The above price quotations must be considered as only roughly indicative of values of veneer logs in any particular log market. As in the case of sawlogs, excepting the log

markets of western Washington and western Oregon, there is little information available on actual transaction prices for veneer logs in terms of standard grades and volume units.

## THE DEMAND AND PRICE OUTLOOK FOR OTHER ROUNDWOOD PRODUCTS

Production of other industrial roundwood products shows variable trends--prices vary widely

The production of industrial roundwood products such as cooperage logs, poles and piling, fence posts, hewn ties, round mine timbers, and a miscellaneous assortment of other products (fuelwood excluded) amounted to about 700 million cubic feet in 1952 and accounted for about 8 percent of the industrial roundwood produced in the United States. Production of individual products has shown variable trends in recent years, but in total there has probably been no significant change in the amount of wood produced.

Cooperage logs.--There has been a general trend away from the use of cooperage in the United States. Between 1906 and 1952, the latest year for which data are available, the volume of timber used in the production of cooperage declined from 1.5 billion board-feet to about 355 million board-feet.

Cooperage bolts for tight cooperage still constitute a relatively high-value product. White oak stave bolts in Illinois are quoted at 85¢ to \$1.35 per chord foot f.o.b. mill (4). Bolts used for slack cooperage are substantially lower in price.

Piling and poles.--In 1952, the latest year for which data are available, about 28 million cubic feet of piling and 6.5 million poles were produced in the United States. This level of production was substantially higher than the average for the period 1925-29 when 21.5 million cubic feet of piling and 3.6 million poles were produced. The upward trend in production of piling reflects increased levels of construction. The increase in the production of poles reflects the great mileage of new power lines that have been installed during recent years, particularly in the Rural Electrification Program.

Pole and piling prices vary considerably according to length, diameter, and other quality factors. Illustrative prices at local points of delivery, taken from State reports published in 1957, are shown in the tabulation below:

Species:	State and source	Price per pole
Southern pine	North Carolina (9) (Coastal Plain)	30 ft. = \$ 1.80 - 4.50
		50 ft. = 11.00 - 17.50
		70 ft. = 31.00 - 42.00
Cedar	Wisconsin (26)	30 ft. = 4.50 - 5.00
Southern pine	Louisiana (5)	30 ft. = 2.75 - 3.60
		50 ft. = 15.35 - 18.60
		70 ft. = 45.00 - 60.10

Posts.--Between 1920 and 1952, the production of wood posts declined from an annual total of about 900 million to an estimated 300 million posts. This decline resulted partly from greater use of steel and concrete posts and partly from increased use of wood preservatives. Farm abandonment or consolidation and the decline in the use of horses on farms have also tended to reduce post use. The influence of such factors, however, is being partially offset by trends toward more intensive pasture management and rangeland improvements.

Fence posts vary considerably in price according to species, size, local availability, and other factors. Prices range between 15¢ and 70¢ a post at local points of delivery.

Wood for charcoal.--The production of wood for charcoal manufacture amounted to about 574 thousand cords in 1956, including 149 thousand cords of residues (28). As indicated by data on charcoal produced, this was slightly above the previous postwar peak reached in 1952, and moderately above production in other postwar years for which data are available.

Production in 1956 was considerably below the level prevailing in the early 1900's. Most of the decline occurred between 1909 and 1939, a period when charcoal production decreased from 555 thousand tons to 251 thousand tons. This decline in production was brought about primarily by the substitution of other materials for charcoal in the manufacture of metals and chemicals and the loss of heating and cooking markets in large cities.

In 1956 the price of roundwood delivered at charcoal plants ranged between a low of \$6.90 per cord in the Central States to a high of \$12.70 per cord in the Lake States, and averaged \$11.70 in the Nation. The price of residues was lower, averaging \$8.75 for the country.

Miscellaneous roundwood timber products.--In 1952, an estimated 315 million cubic feet of timber was produced for hewn ties, mine timbers, box bolts, excelsior bolts, turnery bolts, shingle bolts, smelter poles, farm poles, and similar items. Past trends in the production of these products have been variable--some increasing and others decreasing. In total, however, there has probably not been much change in the level of production in recent years.

Scattered price information is available for a number of these miscellaneous industrial products in regions where their production is important. Box and excelsior bolts in Wisconsin in the second quarter of 1957 were quoted at \$12 to \$22 per cord f.o.b. mill, with prices depending partly on species (26). Excelsior bolts in New Hampshire in 1956 were quoted at \$15 to \$18 per rough cord (24). Turnery bolts in the same State were quoted at from \$20 to \$70 per cord in 1955. Prices for redwood shingle and shake bolts in California currently range from \$22.50 to \$35 per cord f.o.b. mill (22).

The quotations above indicate the scattered nature of price data for other industrial roundwood products. Available prices for these products are usually expressed as a range of prices without indications of quality or measurement practice. Actual sales prices for particular sales may therefore differ materially from quoted prices depending upon buying practices and market locations.

**Production of fuelwood has been declining rapidly**

As a result of a greater use of more convenient and more efficient fuels, such as coal, oil, gas and electricity, the consumption of fuelwood has been declining rapidly, and present production is probably less than one-quarter the volume produced in 1900. Moreover, fuelwood is rapidly becoming a byproduct of timber cut for



industrial wood products. In 1952, an estimated 58.6 million cords of wood was used for fuel. Of this total, some 31.4 million cords or 54 percent was taken from plant residues. Of the 27.2 million cords cut directly from trees, 14.1 million cords came from dead and cull trees and trees on noncommercial forest land and only 13.1 million cords from forest growing stock.

Despite the decline in the consumption of fuelwood, there is still a fairly good market for this product in or near most cities, primarily for use in fireplaces. Prices received for fuelwood at local points of delivery generally range between \$10 and \$20 per cord.

### Consumption of Christmas trees increasing

The use of Christmas trees in the United States is rising, and it is estimated that consumption in 1957 will be in excess of 40 million trees, including about 27 million produced in domestic forests and 13 million imported from Canada. Prices paid to timber growers for Christmas trees vary widely. In California, for example, prices paid on the stump ranged from 10¢ to 35¢ in 1956 (21). During the same year, plantation-grown Christmas trees in Pennsylvania were reported to have sold for prices generally ranging from \$1.50 to \$4 per tree delivered at roadside (12).

## THE LONG-TERM OUTLOOK FOR TIMBER PRODUCTS

The U. S. Forest Service has recently analyzed the future prospects for timber markets in the light of expected trends in the growth of population, gross national product, and other related factors (27). It is estimated that the Nation's population, for example, will increase from about 157 million people in 1952 to 210 million in 1975, and to 275 million in the year 2000 (fig. 19). Gross national product, a more significant market indicator for industrial raw materials is expected to rise from a 1952 level of about \$365 billion to \$630 billion in 1975 and \$1,200 billion in 2000. Other estimates indicate that by 1975, population and gross national product may be considerably above these estimates.

Projections of potential demand, outlined in detail in the Timber Resource Review

report, indicate that by 1975 demand for industrial timber products (excluding fuelwood) may be 25 to 40 percent above 1952. With higher estimates of population and gross national product, potential timber demands would be still higher.

The Timber Resource Review report further indicates that with such increased demands for timber, a tightening timber supply situation is in prospect. Assuming that progress in forest management will continue as indicated by recent trends--and this means substantial progress--timber supplies would be sufficient to meet demands under the lower projection in the years immediately ahead. Within a few decades, however, projected growth would not be sufficient to meet all timber demands, particularly for the preferred softwood species such as southern pine and Douglas-fir and for quality timber. With present forestry efforts the upper projection of potential demand could not be supplied for long without dipping heavily into forest capital.

These projections of potential demand and prospective growth thus point to future supply problems and increased timber values, particularly for the preferred softwoods and high-quality timber. This means problems of raw material supply for many forest industries and pressure for such adjustments as greater use of hardwood in lieu of softwoods. From the standpoint of forest landowners, this also suggests better market opportunities for timber and a greater stimulus for forestry than in the past. From the standpoint of forest industry and the public, this appraisal of the future emphasizes the need for a major strengthening of forestry efforts in the United States.

## THE DEMAND AND PRICE OUTLOOK FOR NAVAL STORES

### Lower output expected in 1957

Production of about 1,960 thousand drums of rosin and 630 thousand barrels of turpentine is expected in the 1957 crop year. Output of gum and steam-distilled wood rosin is expected to decline by about 100 thousand drums while tall oil rosin production increases by about 65 thousand drums. Similarly, in the case of turpentine,



## Population, Gross National Product, and Demand for Timber Products\* with Projections to 1975

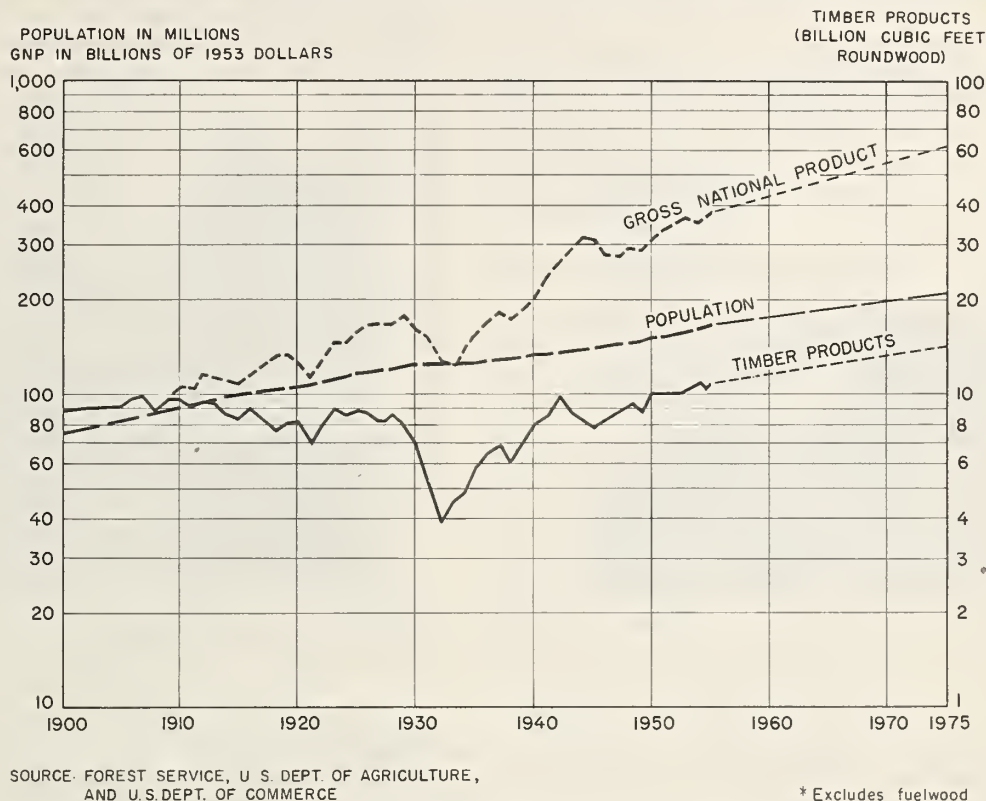


Figure 19

an expected 5 thousand-barrel increase in sulfate turpentine production will be insufficient to offset an anticipated 20 thousand-barrel reduction in the output of gum and steam-distilled wood turpentine (app. tables 9 and 10).

### Long-term shift in output sources likely to continue

Over the past 30 years rosin production has shown a slight upward trend while changes in turpentine production have been inconclusive. The spectacular changes have been in output sources rather than overall volume (fig. 20 and 21). Forty years ago, crude pine gum, collected from living longleaf and slash pines, was virtually the only source of naval stores. Today, rosin and turpentine derived from first-growth stumpwood through solvent extraction and as an accompaniment to the kraft paper-

making process constitute about three-fourths of total output. Gum naval stores production today is less than half the size of the 1949 crop and only one-fourth as large as output in 1930.

During the past 10 years, significant increases have been achieved in gum output per tree and per man-hour (at the same time developing practices for preserving the full value of the tree as future pulp or lumber). Nevertheless, the gum crop has continued to decline partly because paper manufacturers generally have purchased or leased gum-producing pine tracts to grow pulpwood at the maximum rate. Gum output is expected to continue at or slightly below current levels for the next few years. Thereafter, the downward trend may be reversed through application by gum farmers of the results of

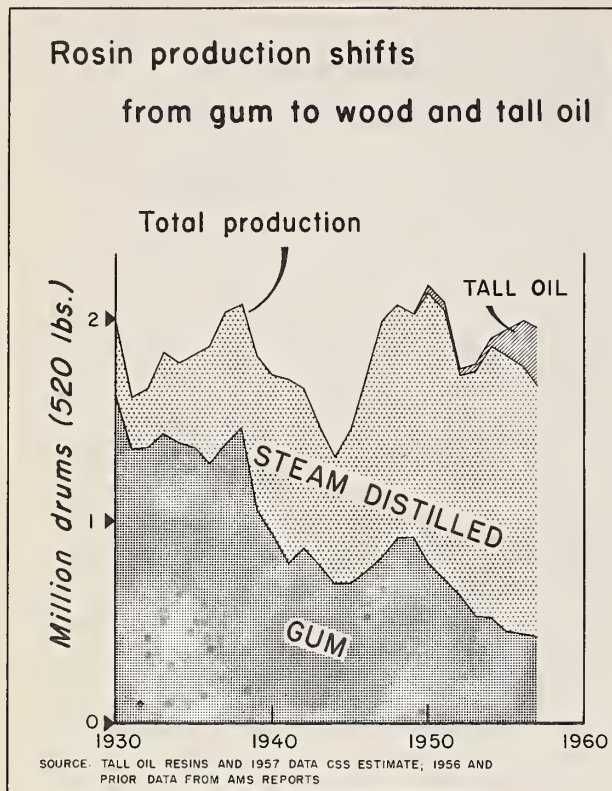


Figure 20

continuing research on greater gum yields and lower labor requirements and by the newly developed tendency of pulp mills to permit gum farming as part of an integrated forestry operation.

Production of steam-distilled rosin and turpentine reached its peak in 1955 and this year will decline for the second consecutive year. Steam-distilled wood naval stores is based on a dwindling supply of first-growth pine stumps, and the long-term outlook is for a gradual decline in output which should offset fully the anticipated increase in tall oil rosin production and, to a lesser extent, the increased production of sulfate wood turpentine.

#### Increased rosin stocks in prospect

Rosin stocks are likely to be higher at the beginning of the next season with the bulk of the increase occurring in CCC holdings. It is expected that between 50 and 70 thousand drums of rosin (12 to 18 percent of the crop) will be placed in the 1957 loan. Most of the pale grades and, perhaps,

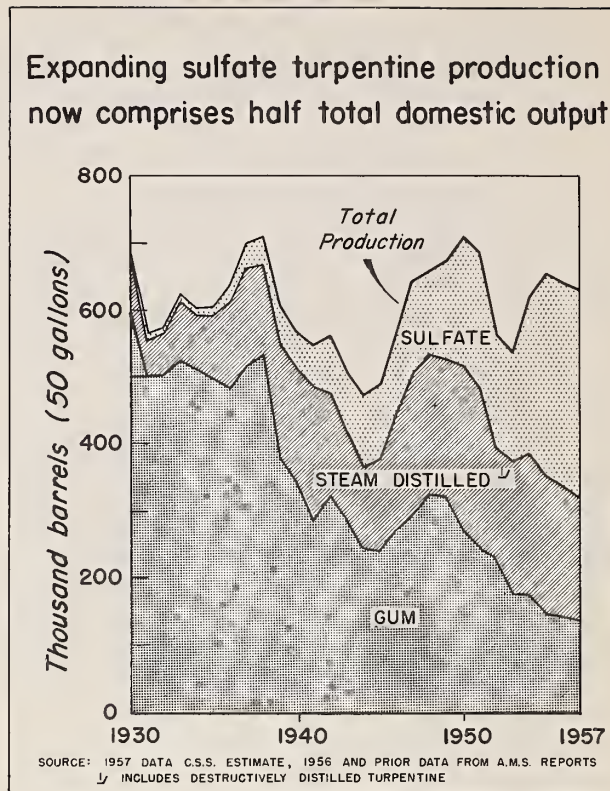


Figure 21

some of the lower grades, probably will be redeemed before next July 1. Overall turpentine stocks may be slightly higher next April 1, although no increase is expected in gum turpentine stocks. Pledges to the 1957 loan program are likely to be negligible and should be redeemed this winter. The main change in stocks since the 1930's has been, not in the overall volume, but rather in the tendency to shift responsibility for them to CCC.

#### Domestic consumption slightly lower in 1957

Slight decreases are likely in domestic consumption of rosin and turpentine during the 1957 crop year. However, the long-term outlook is toward maintenance and ultimate increase in the high consumption level of the past several years.

The lower rosin consumption expected this year reflects in part the temporary interruption in the upward trend of paper and board production and in the output of S-type synthetic rubber. Production of kraft



paper and S-type rubber is down 8 and 4 percent, respectively, January through July 1957, as compared with the same period in 1956. Paper size, the largest single rosin outlet for 30 years, currently accounts for more than one-third of the domestic disappearance of rosin. In the future, it is likely to claim an even greater share of the rosin market. Rosin also is consumed extensively in the production of various chemicals and pharmaceuticals, protective coatings, and as an emulsifying agent in the production of S-type rubber. The shift from the direct marketing of rosin as such to the marketing of modified or specialty rosins is expected to continue.

The slight reduction expected in turpentine consumption is due to the continued decline in requirements for on-the-job thinning of oil base paints because of inroads made by water based paints and competitive paint thinners. Sales in small containers to individual householders have been an important outlet for turpentine since the early 1920's when paint manufacturers shifted from turpentine to cheaper competitive solvents. In 1932, only 17 percent of domestic disappearance represented industrial consumption. In the past 20 years, however, there has been a shift back to industrial use of turpentine (fig. 22). The proportion of turpentine so used in 1956 approximated 60 percent of domestic disappearance and is expected to increase. Sales in small containers are more or less the forte of gum turpentine and, to a lesser extent, steam-distilled wood turpentine. On the other hand, it is mainly the lower priced sulfate wood turpentine that is used industrially.

The principal industrial uses for turpentine follow:

1. Synthetic pine oil. This market shows promise of continued growth as production of natural pine oil, tied to solvent extracted naval stores, declines.

2. Insecticides (chlorinated hydrocarbons). This highly important industrial outlet for turpentine currently may be threatened by the reported development of insect resistance in some areas.

3. Beta pinene. The production and utilization of beta pinene in synthetic resins is

limited only by the output of crude sulfate turpentine. The future of this market seems assured indefinitely.

4. Synthetic camphor. This is a declining market.

5. Oil additives. Much of this market was lost to competing products following World War II when turpentine prices rose to \$1.50 per gallon. Several products now in the development stage are expected to offset the faltering oil additive and synthetic camphor markets.

#### Lower exports likely in 1957

Although exports of rosin, April through July 1957, are substantially higher than a year ago, the total for the crop year ending March 31, 1958, is likely to be lower. Turpentine exports also are expected to be less than last year. Foreign production outside the Communist Bloc countries is expected to surpass output of a year ago by about 130 thousand drums of rosin and 45 thousand barrels of turpentine. The change in actual export availabilities from these countries, however, is less striking than in production, particularly as concerns turpentine. Foreign turpentine stocks on January 1, 1957, were about 35 thousand barrels less than a year earlier. Over the same period, rosin stocks declined slightly. However, it is probable that foreign producing countries this year will strive to minimize carryovers.

#### Developments that may improve export situation

Two factors may tend to brighten prospects for United States naval stores in 1957-58. First, there is evidence this year of substantially reduced exports of Chinese rosin as compared with a year ago. Considered together with substantial shipments of Greek, French, and Portuguese rosins to the Iron Curtain area, this may indicate either lower production or increased consumption in Communist Bloc countries. The importance of such a development may be gaged by the fact that during 1956, about 135 thousand drums of rosin and 48 thousand barrels of turpentine (approximately the above-mentioned increase this year in non-Communist foreign production) were exported to areas outside the Iron Curtain by China, Russia, and Poland.



Secondly, a substantial part of the Spanish surplus of about 70 thousand drums of rosin and 12 thousand barrels of turpentine may not move unless the Spanish government grants an export bonus or a special exchange rate for naval stores exporters. As of September, the Spanish government was reported disinclined so to act. At present, high-cost Spanish rosin is not competitive, pricewise, with rosin originating elsewhere.

#### Exports less important but becoming stabilized

The relative importance of the export outlet for United States rosin and turpentine has been declining since the decade before World War II when rosin and turpentine exports averaged about 900 thousand drums and 250 thousand barrels, respectively. This export volume accounted for 50 percent of the rosin crop and 40 percent of turpentine production (fig. 22 and 23). However, since the end of World War II, exports appear to have stabilized at about 500 to 600

thousand drums of rosin (25 to 30 percent of output) and 80 to 120 thousand barrels of turpentine (15 to 20 percent of production). Even if foreign output were to expand (as appears to be probable in China, South Africa, India, Indonesia, Greece, and Mexico), the growing naval stores requirements of a world striving toward industrialization should tend, in the long run, to maintain United States exports at about present levels.

#### Prices of turpentine and pale rosins expected to rise

Turpentine and high-grade rosin prices are expected to rise before the new gum crop arrives next April 1. Not much change is expected in medium-grade rosins that at present are close to loan value. Through August of this crop year, rosin and turpentine prices have averaged 4 percent less and 1 percent more, respectively, than a year ago (8).

#### Turpentine industrial consumption rises as exports and, more recently, small container retail sales decline

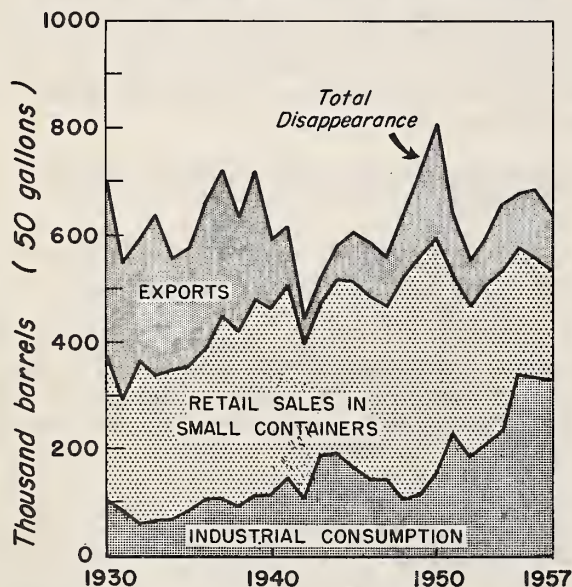


Figure 22

#### Rosin utilization depends increasingly on domestic consumption as export volume declines

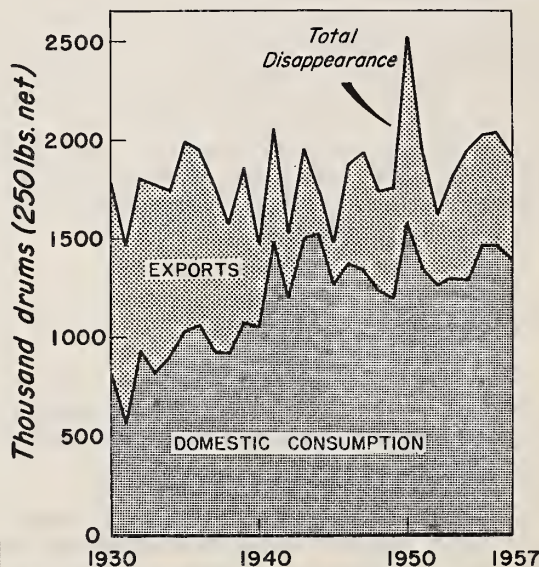


Figure 23

## LITERATURE CITED

- (1) Carroll, W. M., C. E. Trotter, and N. A. Norton.  
1955. Marketing forest products in Pennsylvania. Pa. State Agr. Expt. Sta. Prog. Rpt. 131, 8 pp., illus.
- (2) Cruikshank, J. W., and W. C. Anderson.  
1955. Pine sawtimber stumpage prices in South Carolina, 1948-1954. U. S. Forest Serv. Southeast. Forest Expt. Sta. Paper 57, 14 pp., illus. [Processed.]
- (3) Guttenberg, Sam.  
1956. Influence of timber characteristics upon stumpage prices. U. S. Forest Serv. South. Forest Expt. Sta. Occas. Paper 146, 14 pp., illus. [Processed.]
- (4) Illinois Cooperative Crop Reporting Service, U.S. Dept. of Agr. Illinois Dept. of Agr. and Illinois Technical Forestry Assoc. cooperating.  
Illinois timber products market report.  
[Semiannual. Quotes prices of stumpage by selected species for specified products and for delivered logs, piling, mine materials, and pulpwood.]
- (5) Louisiana Dept. of Agr. and Immigration in cooperation with U. S. Dept. of Agr.  
[Quarterly. Quotes prices of stumpage by selected species for specified products and for delivered logs, poles, pulpwood, and stumpage for distillation.]
- (6) Lumberman, the (Seattle, Wash.).  
[Monthly. Quotes log and lumber prices and annual prices of national forest stumpage by national forest and species.]
- (7) McClay, T. A.  
1952. Comparative stumpage prices for small pine sawtimber and pulpwood. U. S. Forest Serv. Southeast. Forest Expt. Sta. Paper 16, 7 pp. [Processed.]
- (8) Naval Stores Market News Service (Savannah, Ga.).  
[Quotes daily, weekly, and monthly prices for gum turpentine and rosin, and weekly and monthly prices for crude gum.]
- (9) North Carolina State College Extension Forestry Office, and U. S. Dept. of Agr. cooperating.  
Tarheel timber market. [Monthly. Quotes prices for delivered logs for selected species, pine pulpwood and lumber items for selected species.]
- (10) Oregon State College Extension Forestry Office and U. S. Dept. of Agr. cooperating.  
Farm forest products market report. [Weekly. Quotes delivered sawlog and veneer log prices by species and quality grade for several localities. Occasionally reports prices for such miscellaneous products as poles, piling, maple burls, sword fern, and short pulpwood.]
- (11) Parker, J. Reid, and G. H. Aull.  
1953. Farm marketing of sawtimber and pulpwood in a selected area of South Carolina. S. C. Agr. Expt. Sta. Bul. 403, 29 pp., illus.
- (12) Pennsylvania State University Extension Forestry Office, U. S. Dept. of Agr. cooperating.  
Christmas tree market prices for Pennsylvania. [Quotes stumpage and bundle prices for Christmas trees several times during the pre-Christmas season.]



- (13) Purdue University Extension Forestry Office, U. S. Dept. of Agr. cooperating.  
Indiana timber price report. [Semiannual. Quotes prices for delivered sawlogs, veneer logs, pulpwood, and piling.]
- (14) State College of Washington Dept. of Forestry and Range Management.  
Farm woodland market report. [Monthly. Quotes prices for stumpage and delivered logs in Northeastern Washington by species.]
- (15) Steere, Henry B.  
1938. Stumpage prices of privately owned timber in the United States. U. S. Dept. of Agr. Tech. Bul. 626, 162 pp., illus.
- (16) Swain, Lewis C., and Oliver P. Wallace.  
1955. Marketing forest products in New Hampshire. N. H. Agr. Expt. Sta. Bul. 420, 10 pp., illus.
- (17) Timberman, the (Portland, Oreg.).  
[Monthly. Quotes log prices in Columbia River, Grays Harbor, Puget Sound, and Coos Bay for Douglas-fir, hemlock, and western red cedar logs.]
- (18) Todd, Arthur S., Jr.  
1956. Trends in the price of southeastern pine pulpwood. U. S. Forest Serv. Southeast. Forest Expt. Sta. Res. Note 99, 1p. [Processed.]
- (19) \_\_\_\_\_ and John J. Zirkle, Jr.  
1949. Marketing farm timber in Monroe County, Georgia. U. S. Forest Serv. Southeast. Forest Expt. Sta., Paper 3. [Processed.]
- (20) \_\_\_\_\_ and John J. Zirkle, Jr.  
1952. A test of survey methods for estimating stumpage prices. Agr. Econ. Res. 4: 115-125, illus.
- (21) University of California Agricultural Extension Service.  
Christmas tree marketing in California. [Annual. Gives data on production, shipments, marketing practices, and prices of Christmas trees.]
- (22) University of California Agricultural Extension Service, California State Division of Forestry and California Small Woodland Council, cooperating.  
Markets for woodlands products in California. [Annual. Quotes prices for young growth stumpage, delivered logs and bolts, poles and piling, fence posts, pulp chips, redwood burls, tanoak bark, cascara bark, and sword ferns.]
- (23) University of Idaho Extension Forestry Office and U.S. Dept. of Agr. cooperating.  
Woodland markets for Northern Idaho. [Annual. Quotes prices for stumpage, delivered logs and bolts, and lumber, railway crossties, and Christmas trees.]
- (24) University of New Hampshire Extension Forestry Office and State Forestry and Recreation Commission, cooperating.  
Forest market report. [Annual. Quotes prices for stumpage by selected species and products, and for delivered logs and bolts, lumber, poles, piling, fuelwood, posts, and Christmas trees.]
- (25) University of Vermont Extension Forestry Office, and U. S. Dept. of Agr., cooperating.  
Work tools for forestry technicians. [Bimonthly. Quotes prices for delivered logs and bolts in five different marketing areas in the State.]



- (26) University of Wisconsin Extension Forestry Office and Wisconsin Conservation Dept., cooperating.  
Wisconsin forest products price review (currently printed in Lake States Timber Digest). [Semiannual. Quotes prices for stumpage delivered logs and bolts, lumber, railway crossties, piling, poles, and posts.]
- (27) United States Forest Service.  
1955. Timber resource review. [Processed.]
- (28)  
1957. Charcoal production in the United States. 14 pp.
- (29)  
1957. Price trends and relationships for forest products. 85th Cong., House Doc. No. 195, 58 pp.
- (30) United States Bureau of Labor Statistics.  
Prices and price indexes for individual commodities. [Monthly. Quotes (f.o.b. mill) prices of selected lumber items of important commercial species and plywood and pulp and paper items.]



## APPENDIX

TABLE 1.--Estimated production of timber products from roundwood in the United States, 1900-1957  
(Million cubic feet)

Year	Lumber	Pulpwood	Veneer logs	Other roundwood products <sup>1</sup>	Total	Year	Lumber	Pulpwood	Veneer logs	Other roundwood products <sup>1</sup>	Total
1900.....	5,680	140	10	1,460	7,290	1930	4,560	470	150	1,200	6,380
1901.....	5,930	150	10	1,490	7,580	1931	3,110	460	120	970	4,660
1902.....	6,180	160	10	1,530	7,880	1932	2,100	380	120	830	3,430
1903.....	6,450	180	10	1,580	8,220	1933	2,660	460	120	840	4,080
1904.....	6,680	190	20	1,600	8,490	1934	2,920	460	130	860	4,370
1905.....	6,750	200	30	1,640	8,620	1935	3,560	510	140	900	5,110
1906.....	7,140	230	60	1,800	9,230	1936	4,290	580	170	980	6,020
1907.....	7,140	240	60	2,110	9,550	1937	4,510	680	200	1,020	6,410
1908.....	6,520	210	70	1,930	8,730	1938	3,860	610	200	920	5,590
1909.....	6,910	250	80	2,050	9,290	1939	4,470	750	210	960	6,390
1910.....	6,910	240	90	2,080	9,320	1940	4,840	950	230	970	6,990
1911.....	6,680	260	80	2,020	9,040	1941	5,680	1,090	260	1,030	8,060
1912.....	6,990	270	80	2,020	9,360	1942	5,650	1,140	300	1,000	8,090
1913.....	6,830	280	80	2,000	9,190	1943	5,330	1,030	280	920	7,560
1914.....	6,290	280	80	1,930	8,580	1944	5,120	1,170	270	900	7,460
1915.....	5,750	310	90	1,880	8,030	1945	4,370	1,150	250	850	6,620
1916.....	6,180	340	90	1,930	8,540	1946	5,300	1,280	250	890	7,720
1917.....	5,570	360	90	1,930	7,950	1947	5,500	1,390	270	940	8,100
1918.....	4,960	350	90	1,920	7,320	1948	5,750	1,490	290	850	8,380
1919.....	5,370	340	110	1,910	7,730	1949	5,000	1,290	320	750	7,360
1920.....	5,440	390	80	1,890	7,800	1950	5,910	1,510	340	820	8,580
1921.....	4,510	290	70	1,720	6,590	1951	5,780	1,840	390	800	8,810
1922.....	5,480	350	90	1,690	7,610	1952	5,820	1,820	420	700	8,760
1923.....	6,370	360	120	1,700	8,550	1953	5,710	1,890	480	820	8,900
1924.....	6,140	360	120	1,650	8,270	1954	5,650	1,930	480	800	8,860
1925.....	6,370	390	130	1,500	8,390	1955 <sup>2</sup>	6,030	2,220	580	840	9,670
1926.....	6,180	420	140	1,490	8,230	1956 <sup>2</sup>	5,850	2,440	610	790	9,690
1927.....	5,790	430	170	1,440	7,830	1957 <sup>2</sup>	5,410	2,420	590	780	9,200
1928.....	5,710	440	180	1,390	7,720						
1929.....	6,020	490	200	1,380	8,090						

<sup>1</sup> Excludes fuelwood

<sup>2</sup> Preliminary. Subject to revision

Source: Based on data published by the Departments of Commerce and Agriculture and estimates of the Forest Service.



TABLE 2.--Stumpage prices for selected species, 1910-57

(Dollars per thousand board-feet)

Year	Douglas-fir <sup>1</sup>		Southern pine <sup>2</sup>		Sugar pine <sup>3</sup>		Ponderosa pine <sup>3</sup>	
	Current dollars	1947-49 <sup>4</sup> dollars	Current dollars	1947-49 <sup>4</sup> dollars	Current dollars	1947-49 <sup>4</sup> dollars	Current dollars	1947-49 <sup>4</sup> dollars
1910.....	2.20	4.80	1.50	3.30	4.30	9.40	3.60	7.90
1911.....	2.30	5.50	2.80	6.60	2.50	5.90	2.50	5.90
1912.....	2.30	5.10	1.50	3.30	3.50	7.80	2.70	6.00
1913.....	1.70	3.70	1.70	3.70	3.30	7.30	2.20	4.80
1914.....	1.60	3.60	2.90	6.50	3.00	6.80	2.00	4.50
1915.....	2.90	6.40	2.10	4.60	3.40	7.50	2.50	5.50
1916.....	1.20	2.20	3.20	5.80	3.50	6.30	2.90	5.20
1917.....	1.60	2.10	3.40	4.50	2.80	3.70	2.20	2.90
1918.....	1.80	2.10	3.00	3.50	3.40	4.00	2.70	3.20
1919.....	2.40	2.70	3.70	4.10	3.40	3.80	3.00	3.30
1920.....	1.80	1.80	4.40	4.40	5.00	5.00	3.70	3.70
1921.....	1.90	3.00	3.70	5.80	4.20	6.60	3.20	5.00
1922.....	2.50	4.00	2.80	4.50	3.80	6.10	4.00	6.40
1923.....	2.50	3.80	3.00	4.60	4.40	6.70	3.90	6.00
1924.....	2.20	3.40	3.50	5.50	4.20	6.60	3.50	5.50
1925.....	2.10	3.10	3.20	4.80	4.40	6.50	3.60	5.30
1926.....	2.20	3.40	3.60	5.50	4.50	6.90	3.70	5.70
1927.....	2.50	4.00	3.50	5.70	4.00	6.40	3.40	5.40
1928.....	2.90	4.60	3.60	5.70	3.20	5.20	2.50	4.00
1929.....	2.70	4.40	3.50	5.60	4.60	7.50	3.60	5.80
1930.....	3.30	5.90	3.20	5.60	6.30	11.30	3.60	6.30
1931.....	2.90	6.20	3.40	7.20	4.60	9.60	4.20	9.00
1932.....	1.70	3.90	2.80	6.70	3.70	8.80	2.60	6.20
1933.....	1.20	2.80	2.70	6.30	--	--	--	--
1934.....	1.50	3.10	2.90	6.00	3.50	7.20	2.50	5.10
1935.....	1.70	3.30	4.50	8.60	3.10	6.00	2.40	4.60
1936.....	2.10	4.00	--	--	2.80	5.30	2.20	4.20
1937.....	1.60	2.90	5.30	9.40	2.80	5.00	2.20	3.90
1938.....	2.50	4.90	7.30	14.30	3.50	6.90	2.50	5.00
1939.....	--	--	5.80	11.50	3.10	6.20	2.40	4.70
1940.....	2.30	4.60	4.50	8.70	3.00	6.00	2.20	4.30
1941.....	3.60	6.30	10.80	19.10	3.40	6.00	2.60	4.60
1942.....	--	--	8.90	13.90	4.80	7.40	2.70	4.20
1943.....	--	--	8.70	13.00	4.20	6.20	5.00	7.40
1944.....	5.20	7.70	10.90	16.20	5.20	7.70	4.00	5.80
1945.....	5.00	7.20	9.30	13.60	7.30	10.60	5.60	8.10
1946.....	6.60	8.40	8.90	11.40	7.20	9.20	5.80	7.30
1947.....	9.90	10.30	10.90	11.30	12.50	13.00	8.30	8.60
1948.....	19.90	19.10	16.40	15.70	16.20	15.50	14.60	14.00
1949.....	11.10	11.20	19.70	19.90	18.90	19.00	17.60	17.70
1950.....	16.40	15.90	26.70	25.90	25.00	24.20	18.30	17.70
1951.....	25.40	22.10	34.60	30.10	40.40	35.20	33.60	29.30
1952.....	25.80	23.10	38.50	34.50	36.40	32.60	27.40	24.60
1953.....	20.20	18.30	34.20	31.10	30.20	27.50	25.90	23.50
1954.....	16.20	14.70	29.70	26.90	31.20	28.30	27.20	24.70
1955.....	28.90	26.10	32.00	28.90	30.00	27.10	26.10	23.60
1956.....	37.70	33.00	37.40	32.70	34.90	32.70	27.20	23.80
1957 <sup>5</sup> .....	33.80	28.90	32.30	27.60	34.70	29.70	31.60	27.00

<sup>1</sup> 1910-31 National Forest timber sales, all species Washington and Oregon; 1932-41 all species western Washington and western Oregon; 1944-1957, National Forest and BIM sales, Douglas-fir only in western Washington and western Oregon. All U.S. Forest Service National Forest prices in this table are the bid prices for timber sold on a Scribner C log scale basis, including Knutsen-Vandenberg Act deposits for stand improvement but excluding cooperative deposits and slash-disposal payments.

<sup>2</sup> 1910-34 stumpage prices of privately owned second-growth southern pine timber, Steer (15); 1935-49 National Forest timber sales all species; 1950-57 National Forest timber sales pine only.

<sup>3</sup> 1910-57 National Forest timber sales, California.

<sup>4</sup> Adjusted on the basis of the wholesale price index of all commodities as reported by the Bureau of Labor Statistics (29).

<sup>5</sup> 1st quarter 1957.

TABLE 3.--Pulpwood stumpage prices of selected species, 1935-57  
(Dollars per standard cord)

Year	Southern pine		Spruce	
	National forest <sup>1</sup>	Private <sup>2</sup>	Lake States	
			National forest <sup>1</sup>	Private <sup>3</sup>
1935.....	0.70			
1936.....	1.00			
1937.....	.80			3.00
1938.....	.90	0.80		
1939.....	1.00	.90		
1940.....	1.00	1.00		2.00
1941.....	.90	1.10		3.10
1942.....	.80	1.40		3.50
1943.....	.80	1.80		3.80
1944.....	1.00	1.90		4.20
1945.....	.80	2.00	1.40	4.20
1946.....	1.20	2.50	2.50	--
1947.....	1.20	2.80	2.40	4.90
1948.....	1.70	2.80	3.50	8.00
1949.....	1.90	2.90	3.80	6.00
1950.....	2.10	3.30	2.60	5.50
1951.....	3.00	3.50	5.40	7.00
1952.....	3.20	3.80	4.50	7.50
1953.....	3.40	4.00	3.70	7.20
1954.....	3.80	4.20	3.90	6.50
1955.....	4.00	4.50	--	7.50
1956.....	4.95	5.40	4.50	7.50
1957.....	<sup>4</sup> 4.85	5.30	<sup>4</sup> 6.10	7.25

<sup>1</sup> Source: Forest Service, U. S. Department of Agriculture.

<sup>2</sup> Estimated by Forest Service, U. S. Department of Agriculture.

<sup>3</sup> Source: University of Wisconsin Extension Forestry Office (25).

<sup>4</sup> 1st quarter 1957.

TABLE 4.--Lumber production, imports, exports, and consumption in the United States, for selected years 1899-1957

Year	Domestic production	Imports	Exports	Stock changes	Apparent consumption	Per capita consumption
	<i>Billion board-feet</i>	<i>Billion board-feet</i>	<i>Billion board-feet</i>	<i>Billion board-feet</i>	<i>Billion board-feet</i>	<i>Board-feet</i>
1899.....	35.1	0.4	1.4	--	34.1	458
1905.....	43.5	.7	1.8	--	42.4	506
1910.....	44.5	1.1	2.2	--	43.4	470
1915.....	37.0	.9	1.3	--	36.6	364
1920.....	35.0	1.4	1.7	--	34.7	326
1925.....	41.0	1.8	2.6	--	40.2	347
1930.....	29.4	1.2	2.4	--	28.2	229
1931.....	20.0	.7	1.7	--	19.0	153
1932.....	13.5	.4	1.2	--	12.7	102
1933.....	17.2	.4	1.3	--	16.3	130
1934.....	18.8	.3	1.3	--	17.8	141
1935.....	22.9	.4	1.3	-1.3	23.3	183
1936.....	27.6	.7	1.3	1.3	25.7	201
1937.....	29.0	.7	1.4	2.4	25.9	201
1938.....	24.8	.5	1.0	.7	23.6	182
1939.....	28.8	.7	1.1	--	28.4	217
1940.....	31.2	.7	1.0	-3.4	34.3	260
1941.....	36.5	1.4	.7	1.0	36.2	271
1942.....	36.3	1.5	.5	-6.5	43.8	325
1943.....	34.3	.9	.3	-3.9	38.8	284
1944.....	32.9	1.0	.4	-1.1	34.6	250
1945.....	28.1	1.1	.4	-1.8	30.6	219
1946.....	34.1	1.2	.6	1.2	33.5	237
1947.....	35.4	1.3	1.4	1.5	33.8	235
1948.....	37.0	1.9	.6	1.9	36.4	248
1949.....	32.2	1.6	.7	-1.3	34.4	231
1950.....	38.0	3.4	.5	.2	40.7	268
1951.....	37.2	2.5	1.0	.8	37.9	245
1952.....	37.5	2.5	.7	-.3	39.6	252
1953.....	36.7	2.8	.6	.8	38.1	239
1954.....	36.4	3.1	.7	.4	38.4	236
1955 <sup>1</sup> .....	38.8	3.6	.8	-.4	42.0	254
1956 <sup>1</sup> .....	37.1	3.4	.8	.6	39.1	232
1957 <sup>1</sup> .....	34.8	2.7	1.0	.9	35.6	208

<sup>1</sup> Preliminary. Subject to revision.

Source: U. S. Department of Commerce, Bureau of the Census; U. S. Department of Agriculture, Forest Service



TABLE 5.--Estimated lumber production in the United States, by regions and by hardwoods and softwoods, selected years 1899-1957<sup>1</sup>

Year	All regions			North			South			West, total <sup>2</sup>
	Total	Hardwoods	Softwoods	Total	Hardwoods	Softwoods	Total	Hardwoods	Softwoods	
		Billion board-feet	Billion board-feet		Billion board-feet	Billion board-feet		Billion board-feet	Billion board-feet	
1899.....	35.1	8.9	26.2	18.6	6.6	12.0	12.9	2.3	10.7	Billion board-feet 3.5
1905.....	43.5	10.5	33.0	20.1	7.3	12.8	16.5	3.3	13.3	6.9
1910.....	44.5	10.5	34.0	15.6	7.5	8.0	20.0	2.9	17.1	8.9
1915.....	37.0	7.5	29.5	10.0	4.7	5.3	18.8	2.8	16.0	8.2
1920.....	35.0	7.4	27.6	6.9	3.8	3.0	16.0	3.5	12.5	12.1
1925.....	41.0	7.7	33.3	6.0	3.6	2.5	19.6	4.1	15.5	15.3
1930.....	29.4	6.1	23.2	4.5	2.9	1.6	12.6	3.2	9.4	12.2
1935.....	22.9	4.7	18.2	3.8	2.4	1.5	10.0	2.3	7.7	9.1
1940.....	31.2	5.5	25.6	4.6	2.9	1.7	13.3	2.6	10.7	13.2
1941.....	36.5	6.7	29.9	5.3	3.3	2.0	15.5	3.3	12.2	15.7
1942.....	36.3	6.8	29.5	5.1	3.2	2.0	15.6	3.6	12.0	15.6
1943.....	34.3	7.4	26.9	4.9	3.2	1.7	14.3	4.2	10.2	15.0
1944.....	32.9	7.8	25.2	5.4	3.5	1.9	12.6	4.3	8.3	15.0
1945.....	28.1	7.0	21.1	4.5	2.8	1.7	11.5	4.1	7.4	12.1
1946.....	34.1	8.3	25.9	4.9	3.1	1.9	14.7	5.1	9.6	14.4
1947.....	35.4	7.4	28.0	5.4	3.4	2.0	13.6	4.0	9.6	16.3
1948.....	37.0	7.4	29.6	6.0	3.4	2.6	13.2	4.0	9.2	17.8
1949.....	32.2	5.7	26.5	4.1	2.6	1.5	11.6	3.1	8.5	16.5
1950.....	38.0	7.4	30.6	4.9	3.0	2.0	14.6	4.4	10.2	18.6
1951.....	37.2	7.7	29.5	5.0	3.3	1.7	13.3	4.4	8.9	18.9
1952.....	37.5	7.2	30.3	4.1	2.7	1.4	13.7	4.5	9.2	19.7
1953.....	36.7	7.2	29.5	5.0	3.5	1.5	11.8	3.7	8.1	19.9
1954.....	36.4	7.0	29.3	4.6	3.0	1.7	11.7	4.1	7.7	20.0
1955 <sup>3</sup> .....	38.8	7.2	31.6	4.9	3.1	1.8	12.7	4.1	8.6	21.1
1956 <sup>3</sup> .....	37.1	7.1	30.0	4.8	3.1	1.7	12.3	4.0	8.3	20.0
1957 <sup>3</sup> .....	34.8	6.3	28.5	4.6	2.7	1.8	11.8	3.6	8.2	18.4

<sup>1</sup> Data may not add to total because of rounding.<sup>2</sup> Practically all softwoods.<sup>3</sup> Preliminary. Subject to revision.

Source: U. S. Department of Commerce, Bureau of the Census; U. S. Department of Agriculture, Forest Service.

TABLE 6.--Douglas-fir log prices, western Oregon and western Washington, 1910-57

(Dollars per thousand board-feet log scale)

Year	Sawlogs					Peeler logs				
	Grade #1, current dollars	Grade #2, current dollars	Grade #3, current dollars	Average		Grade #1, current dollars	Grade #2, current dollars	Grade #3, current dollars	Average	
				Current dollars	1947-49 dollars				Current dollars	1947-49 dollars
1910.....	12.80	9.80	6.80	9.00	19.60	--	--	--	--	--
1911.....	12.00	9.20	6.10	8.00	19.00	--	--	--	--	--
1912.....	12.00	9.10	6.30	8.00	17.80	--	--	--	--	--
1913.....	13.00	9.50	6.60	8.50	18.70	--	--	--	--	--
1914.....	11.50	8.40	5.50	7.50	16.90	--	--	--	--	--
1915.....	11.00	8.10	5.50	7.00	15.50	--	--	--	--	--
1916.....	12.20	9.40	6.50	8.50	15.30	--	--	--	--	--
1917.....	15.00	12.00	9.00	11.00	14.40	--	--	--	--	--
1918.....	19.50	15.80	11.70	14.50	17.00	--	--	--	--	--
1919.....	22.20	17.90	9.50	17.00	18.80	--	--	--	--	--
1920.....	30.50	24.00	18.00	22.00	22.00	--	--	--	--	--
1921.....	21.00	16.50	12.00	14.50	22.90	--	--	--	--	--
1922.....	23.50	17.00	12.00	15.00	23.90	--	--	--	--	--
1923.....	27.00	20.50	14.50	18.50	28.30	--	--	--	--	--
1924.....	24.00	18.00	13.00	16.00	25.10	--	--	--	--	--
1925.....	24.00	17.00	12.00	15.00	22.30	--	--	--	--	--
1926.....	23.50	18.00	12.00	16.00	24.60	--	--	--	--	--
1927.....	23.00	17.00	12.00	15.00	24.20	--	--	--	--	--
1928.....	23.00	17.50	12.00	15.50	24.60	--	--	--	--	--
1929.....	24.00	18.00	12.50	16.00	25.80	--	--	--	--	--
1930.....	24.00	17.50	12.00	15.50	27.60	--	--	--	--	--
1931.....	17.00	13.00	8.50	11.00	23.20	--	--	--	--	--
1932.....	15.50	11.50	7.50	9.50	22.60	--	--	--	--	--
1933.....	15.50	11.50	8.50	9.50	22.20	--	--	--	--	--
1934.....	18.00	13.00	9.50	11.00	22.60	--	--	--	--	--
1935.....	18.00	13.50	9.00	11.50	22.10	--	--	--	--	--
1936.....	22.50	16.00	10.00	14.00	26.70	29.00	24.00	22.50	25.00	47.60
1937.....	24.00	17.50	11.00	15.50	27.60	31.00	26.50	22.50	27.50	49.00
1938.....	23.00	16.50	10.00	14.50	28.40	31.00	28.00	25.50	29.00	56.80
1939.....	23.00	16.50	10.00	14.50	28.90	32.00	26.50	23.50	27.50	54.90
1940.....	24.00	17.50	10.50	15.50	30.30	34.00	27.00	24.00	28.00	54.80
1941.....	26.00	19.00	12.00	17.00	29.90	38.00	31.00	26.00	32.00	56.30
1942.....	--	--	--	--	--	--	--	--	--	--
1943.....	--	--	--	--	--	--	--	--	--	--
1944.....	--	--	--	--	--	--	--	--	--	--
1945.....	--	--	--	--	--	--	--	--	--	--
1946.....	--	--	--	--	--	--	--	--	--	--
1947.....	42.90	34.70	30.40	33.70	35.00	62.90	55.40	48.10	56.40	58.50
1948.....	49.30	41.10	32.80	39.30	37.70	88.90	78.10	68.90	79.70	76.30
1949.....	50.00	40.60	32.60	39.00	39.30	86.90	72.90	57.00	74.90	75.50
1950.....	57.10	46.20	38.70	44.70	43.40	102.60	89.00	73.60	89.40	86.70
1951.....	60.20	49.40	41.80	47.90	41.70	108.20	97.30	81.80	96.50	84.10
1952.....	64.20	52.40	42.90	50.60	45.40	108.40	98.20	80.70	96.00	86.00
1953.....	62.30	49.70	41.10	48.00	43.60	109.60	98.80	80.20	96.30	87.50
1954.....	60.40	50.20	40.70	48.10	43.60	109.00	98.40	79.60	94.80	85.90
1955.....	64.50	54.60	44.80	52.20	47.20	111.50	102.30	83.40	96.30	87.00
1956.....	68.40	57.90	48.00	55.00	48.10	114.20	105.50	86.20	99.10	86.70
1957.....	67.00	59.00	45.00	55.00	46.50	110.00	101.00	82.00	95.00	80.30

Source: 1910-32, *The Timberman*; subsequent data for the years 1933-56, inclusive, from Pacific Northwest Forest and Range Experiment Station compilation of average annual regional log values based on transactions shown in Pacific Northwest Loggers Association composite sales analyses. 1957, Forest Service estimate.

TABLE 7.--Estimated pulpwood production in the United States, by regions and by hardwoods and softwoods, selected years 1899-1957<sup>1</sup>

Year	All regions			North			South			West, total <sup>2</sup>
	Total	Hardwoods	Softwoods	Total	Hardwoods	Softwoods	Total	Hardwoods	Softwoods	
1899.....	1.6	0.5	1.2	1.4	0.5	1.0	--	--	--	0.2
1905.....	2.5	.4	2.1	2.5	.4	2.1	0.1	--	0.1	--
1910.....	3.1	.8	2.3	2.8	.7	2.1	.3	0.1	.1	.1
1916.....	4.4	.7	3.7	4.2	.6	3.6	.2	.2	.1	--
1920.....	5.0	.8	4.3	4.5	.5	4.0	.4	.3	.1	.2
1925.....	5.0	.7	4.3	4.1	.4	3.7	.6	.3	.3	.3
1930.....	6.1	.8	5.3	3.9	.4	3.5	1.0	.4	.5	1.2
1935.....	6.6	.9	5.7	2.9	.3	2.6	1.4	.6	.9	2.2
1941.....	14.2	1.8	12.3	4.4	1.1	3.3	7.2	.7	6.4	2.6
1942.....	14.9	1.9	13.0	5.0	1.2	3.8	7.3	.7	6.6	2.6
1943.....	13.6	1.8	11.8	4.0	1.1	2.9	7.1	.7	6.5	2.5
1944.....	15.3	2.0	13.4	4.6	1.0	3.5	8.2	1.0	7.2	2.6
1945.....	15.3	2.2	13.1	4.7	1.1	3.6	8.1	1.1	7.0	2.5
1946.....	17.0	2.6	14.4	5.6	1.4	4.2	8.8	1.2	7.6	2.6
1947.....	18.5	2.5	16.0	5.6	1.3	4.3	9.3	1.2	8.1	3.6
1948.....	20.0	2.5	17.5	5.4	1.2	4.2	11.4	1.3	10.1	3.3
1949.....	17.6	2.3	15.3	4.6	1.3	3.3	9.9	1.0	8.9	3.1
1950.....	20.7	2.9	17.8	5.0	1.7	3.3	12.4	1.2	11.2	3.3
1951.....	25.1	3.8	21.3	6.3	2.2	4.1	14.1	1.6	12.5	4.7
1952.....	25.1	3.7	21.4	6.0	1.9	4.1	14.6	1.8	12.8	4.5
1953.....	26.3	4.2	22.1	5.4	2.2	3.2	16.2	2.0	14.2	4.7
1954.....	27.0	4.8	22.2	5.5	2.6	2.9	16.4	2.2	14.2	5.1
1955.....	30.9	5.3	25.6	6.3	2.7	3.6	18.4	2.6	15.8	6.2
1956.....	35.2	6.1	29.1	7.3	3.2	4.1	20.3	2.9	17.4	7.6
1957 <sup>3</sup> .....	34.0	5.8	28.2	7.0	3.1	3.9	19.6	2.7	16.9	7.4

<sup>1</sup> Data may not add to totals because of rounding.<sup>2</sup> Practically all softwoods.<sup>3</sup> Preliminary. Subject to revision.

Source: U. S. Department of Commerce, Bureau of the Census; U. S. Department of Agriculture, Forest Service.



TABLE 8.--Pulpwood prices at local delivery points, 1933-57

(Dollars per standard cord, including bark)

Year	Southern pine <sup>1</sup>		Lake States spruce <sup>2</sup>	
	Current dollars	1947-49 dollars	Current dollars	1947-49 dollars
1933.....	--	--	7.75	18.10
1934.....	--	--	7.25	14.90
1935.....	--	--	7.75	14.90
1936.....	--	--	7.50	14.30
1937.....	--	--	9.75	17.40
1938.....	3.60	7.00	8.50	16.60
1939.....	3.90	7.80	9.00	18.00
1940.....	4.20	8.20	9.00	17.60
1941.....	4.60	8.10	10.50	18.50
1942.....	6.00	9.30	12.25	19.10
1943.....	7.20	10.70	14.75	22.00
1944.....	8.20	12.10	15.00	22.20
1945.....	8.40	12.20	15.00	21.80
1946.....	10.10	12.80	16.50	21.00
1947.....	11.00	11.40	23.75	24.60
1948.....	11.70	11.20	22.25	21.30
1949.....	11.00	11.10	18.50	18.60
1950.....	11.90	11.50	19.50	18.90
1951.....	13.80	12.00	22.50	19.60
1952.....	13.90	12.50	26.50	23.70
1953.....	13.90	12.60	24.75	22.50
1954.....	14.00	12.70	24.75	22.40
1955.....	14.40	13.00	24.75	22.40
1956.....	15.30	13.40	26.75	23.40
1957.....	15.30	13.10	27.25	23.30

<sup>1</sup> Source: U. S. Department of Agriculture, Forest Service (18).<sup>2</sup> Source: University of Wisconsin Extension Forestry Office (25).

TABLE 9.--Supplies, requirements, and prices for rosin, by types; selected crop years beginning April 1, 1930, and annually, 1948 through 1957 (520-lb. drums)

Crop year beginning April 1, and commodity and type	Supply				Requirements			Carry-out stocks <sup>1</sup>	Average price per 100 lbs. net
	Carry-in stocks <sup>1</sup>	Production	Imports	Total supply	Domestic	Export	Total		
1930:	Drums	Drums	Drums	Drums	Drums	Drums	Drums	Drums	Dollars
Gum.....	( <sup>2</sup> )	1,620,726	725	( <sup>2</sup> )	<sup>3</sup> 605,093	834,907	<sup>3</sup> 1,440,000	( <sup>2</sup> )	2.18
Steam-distilled wood.....	( <sup>2</sup> )	351,134	0	( <sup>2</sup> )	<sup>3</sup> 204,782	140,603	<sup>3</sup> 345,385	( <sup>2</sup> )	--
Total.....	487,200	1,971,860	725	2,459,785	809,875	975,510	1,785,385	674,400	--
1935:	( <sup>2</sup> )	1,360,950	2,290	( <sup>2</sup> )	<sup>3</sup> 789,648	740,352	<sup>3</sup> 1,530,000	( <sup>2</sup> )	1.97
Gum.....	( <sup>2</sup> )	460,243	0	( <sup>2</sup> )	<sup>3</sup> 240,784	223,198	<sup>3</sup> 463,982	( <sup>2</sup> )	--
Steam-distilled wood.....	783,144	1,821,193	2,290	2,606,627	1,030,432	963,550	1,993,982	612,645	--
Total.....	1,127,719	938,911	1,788	2,068,418	525,494	220,337	745,831	1,322,587	1.98
1940:	127,798	778,581	0	906,379	526,165	203,473	729,638	176,741	--
Gum.....	1,255,517	1,717,492	1,788	2,974,797	1,051,659	423,810	1,475,469	1,499,328	--
Steam-distilled wood.....	265,881	694,476	9,795	970,152	627,294	105,354	732,648	237,504	6.50
1945:	122,385	757,560	0	879,945	640,095	101,456	741,551	138,394	--
Gum.....	388,266	1,452,036	9,795	1,850,097	1,267,389	206,810	1,474,199	375,898	--
Steam-distilled wood.....	162,090	921,220	1,071	1,084,381	370,583	236,228	606,811	477,570	7.39
1948:	115,890	1,154,890	0	1,270,780	864,071	266,049	1,130,120	140,660	--
Gum.....	277,980	2,076,110	1,071	2,355,161	1,234,654	502,277	1,736,931	618,230	--
Steam-distilled wood.....	477,570	924,900	4,229	1,406,699	347,152	256,927	604,079	802,620	6.47
1949:	140,660	1,098,610	0	1,239,270	842,512	305,098	1,147,610	91,660	--
Gum.....	0	4,000	0	4,000	0	0	0	4,000	--
Steam-distilled wood.....	618,230	2,027,510	4,229	2,649,969	1,189,664	562,025	1,751,689	898,280	--
Tall oil <sup>3</sup> .....	802,620	797,620	4,475	1,604,715	550,584	595,591	1,146,175	458,540	6.31
1950:	91,660	1,339,410	0	1,431,070	985,348	345,682	1,331,030	100,040	--
Gum.....	4,000	35,000	0	39,000	37,000	( <sup>4</sup> )	37,000	2,000	--
Steam-distilled wood.....	898,280	2,172,030	4,475	3,074,785	1,572,932	941,273	2,514,205	560,580	--
Tall oil <sup>3</sup> .....	458,540	716,350	1,980	1,176,870	392,190	293,140	685,330	491,540	8.73
1951:	100,040	1,333,040	0	1,433,080	923,479	278,561	1,202,040	231,040	--
Gum.....	2,000	35,000	0	37,000	30,000	( <sup>4</sup> )	30,000	7,000	--
Steam-distilled wood.....	560,580	2,084,390	1,980	2,646,950	1,345,669	571,701	1,917,370	729,580	--
Tall oil <sup>3</sup> .....	491,540	638,360	3,000	1,132,900	312,563	138,577	451,140	681,760	7.53
1952:	231,040	1,082,530	0	1,313,570	917,178	218,062	1,135,240	178,330	--
Gum.....	7,000	30,000	0	37,000	31,000	( <sup>4</sup> )	31,000	6,000	--
Steam-distilled wood.....	729,580	1,750,890	3,000	2,483,470	1,260,741	356,639	1,617,380	866,090	--
Tall oil <sup>3</sup> .....	681,760	531,620	1,410	1,214,790	348,050	132,100	480,150	734,640	7.72
1953:	178,330	1,213,340	0	1,391,670	913,880	384,350	1,298,230	93,440	--
Gum.....	6,000	35,000	0	41,000	37,000	( <sup>4</sup> )	37,000	4,000	--
Steam-distilled wood.....	866,090	1,779,960	1,410	2,647,460	1,298,930	516,450	1,815,380	832,080	--
Tall oil <sup>3</sup> .....	734,640	527,700	390	1,262,730	345,220	208,840	554,060	708,670	7.91
1954:	93,440	1,342,370	0	1,435,810	887,420	458,470	1,345,890	89,920	--
Gum.....	4,000	50,000	0	54,000	49,000	( <sup>4</sup> )	49,000	5,000	--
Steam-distilled wood.....	832,080	1,920,070	390	2,752,540	1,281,640	667,310	1,948,950	803,590	--
Tall oil <sup>3</sup> .....	708,670	452,970	650	1,162,290	406,689	151,091	557,780	604,510	8.45
1955:	89,920	1,369,440	0	1,459,360	945,892	400,598	1,346,490	112,870	--
Gum.....	5,000	125,000	0	130,000	115,000	( <sup>4</sup> )	115,000	15,000	--
Steam-distilled wood.....	803,590	1,947,410	650	2,751,650	1,467,581	551,689	2,019,270	732,380	--
Tall oil <sup>3</sup> .....	604,510	444,590	520	1,049,620	347,320	136,050	483,370	566,250	8.37
1956:	112,870	1,324,220	0	1,437,090	875,260	467,960	1,343,220	93,870	--
Gum.....	15,000	225,000	0	240,000	210,000	( <sup>4</sup> )	210,000	30,000	--
Steam-distilled wood.....	732,380	1,993,810	520	2,726,710	1,362,580	604,010	2,036,590	690,120	--
Tall oil <sup>3</sup> .....	566,000	430,000	1,000	997,000	267,000	130,000	397,000	600,000	7.90
1957: <sup>3</sup>	94,000	1,240,000	0	1,334,000	839,000	400,000	1,239,000	95,000	--
Gum.....	30,000	290,000	0	320,000	285,000	( <sup>4</sup> )	285,000	35,000	--
Steam-distilled wood.....	690,000	1,960,000	1,000	2,651,000	1,391,000	530,000	1,921,000	730,000	--
Tall oil <sup>3</sup> .....									

<sup>1</sup> Includes CCC loan stocks. These are gross stocks and include rosin sold and awaiting shipment.<sup>2</sup> No breakdown practicable from existing information.<sup>3</sup> Estimated.<sup>4</sup> Exports of tall oil rosin are combined with steam-distilled wood rosin exports as reported by the Bureau of the Census. Consequently, the estimated domestic consumption of tall oil rosin necessarily includes steam-distilled wood rosin to the extent of such tall oil rosin exports.

Source: Reports of Agricultural Marketing Service, U.S.D.A.; and Bureau of the Census, Department of Commerce; records of Commodity Stabilization Service, U.S.D.A.

TABLE 10.--Supply, requirements, and prices for turpentine, by types; selected crop years beginning April 1, 1930, and annually, 1948 through 1957, (50-gal. barrels)

Crop year beginning April 1, and commodity and type	Supply				Requirements			Carry-out stocks <sup>1</sup>	Average price per gallon
	Carry-in stocks <sup>1</sup>	Production	Imports	Total supply	Domestic	Export	Total		
1930:	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Barrels	Dollars
Gum.....	(2)	598,769	7,931	(2)	<sup>3</sup> 288,516	309,484	<sup>3</sup> 598,000	(2)	0.333
Wood (total).....	(2)	86,533	0	(2)	84,404	17,829	<sup>3</sup> 102,233	(2)	--
Steam-distilled.....	(2)	76,366	0	(2)	(2)	(2)	(2)	(2)	--
Sulfate.....	(2)	3,969	0	(2)	(2)	(2)	(2)	(2)	--
Destructive-distilled.....	(2)	6,198	0	(2)	(2)	(2)	(2)	(2)	--
Total.....	127,000	685,302	7,931	820,233	372,920	327,313	700,233	120,000	--
1935:	(2)	497,000	12,495	(2)	<sup>3</sup> 269,918	205,082	<sup>3</sup> 475,000	(2)	.376
Gum.....	(2)	105,908	0	(2)	<sup>3</sup> 82,326	19,300	101,626	(2)	--
Wood (total).....	(2)	88,875	0	(2)	(2)	(2)	(2)	(2)	--
Steam-distilled.....	(2)	11,712	0	(2)	(2)	(2)	(2)	(2)	--
Sulfate.....	(2)	5,321	0	(2)	(2)	(2)	(2)	(2)	--
Destructive-distilled.....	(2)	5,321	0	(2)	(2)	(2)	(2)	(2)	--
Total.....	191,359	602,908	12,495	806,762	352,244	224,382	576,626	230,136	--
1940:	167,943	343,938	16,688	528,569	278,707	103,127	381,834	146,735	.240
Gum.....	52,324	222,403	0	274,727	183,824	27,728	211,552	63,175	--
Wood (total).....	(2)	161,161	0	(2)	(2)	(2)	(2)	(2)	--
Steam-distilled.....	(2)	54,081	0	(2)	(2)	(2)	(2)	(2)	--
Sulfate.....	(2)	7,161	0	(2)	(2)	(2)	(2)	(2)	--
Destructive-distilled.....	(2)	7,161	0	(2)	(2)	(2)	(2)	(2)	--
Total.....	220,267	566,341	16,688	803,296	462,531	130,855	593,386	209,910	--
1945:	168,011	244,252	14,932	427,195	301,996	67,111	369,107	58,088	.791
Gum.....	34,535	243,879	0	278,414	210,419	25,334	235,753	42,661	--
Wood (total).....	(2)	129,101	0	(2)	(2)	(2)	(2)	(2)	--
Steam-distilled.....	(2)	110,262	0	(2)	(2)	(2)	(2)	(2)	--
Sulfate.....	(2)	4,516	0	(2)	(2)	(2)	(2)	(2)	--
Destructive-distilled.....	(2)	4,516	0	(2)	(2)	(2)	(2)	(2)	--
Total.....	202,546	488,131	14,932	705,609	512,415	92,445	604,860	100,749	--
1948:	87,390	324,330	13,613	425,333	227,287	70,916	298,203	127,130	.428
Gum.....	107,960	334,810	0	442,770	294,442	45,768	340,210	102,560	--
Wood (total).....	(2)	207,160	0	(2)	(2)	(2)	(2)	(2)	--
Steam-distilled.....	(2)	124,870	0	(2)	(2)	(2)	(2)	(2)	--
Sulfate.....	(2)	2,780	0	(2)	(2)	(2)	(2)	(2)	--
Destructive-distilled.....	(2)	2,780	0	(2)	(2)	(2)	(2)	(2)	--
Total.....	195,350	659,140	13,613	868,103	521,729	116,684	638,413	229,690	--
1949:	127,130	323,010	14,170	464,310	240,380	99,270	339,650	124,660	.384
Gum.....	102,560	350,280	0	452,840	315,256	56,284	371,540	81,300	--
Wood (total).....	(2)	199,630	0	(2)	(2)	(2)	(2)	(2)	--
Steam-distilled.....	(2)	147,500	0	(2)	(2)	(2)	(2)	(2)	--
Sulfate.....	(2)	3,150	0	(2)	(2)	(2)	(2)	(2)	--
Destructive-distilled.....	(2)	3,150	0	(2)	(2)	(2)	(2)	(2)	--
Total.....	229,690	673,290	14,170	917,150	555,636	155,554	711,190	205,960	--
1950:	124,660	271,880	16,771	413,311	239,940	137,771	377,711	35,600	.551
Gum.....	81,300	436,670	0	517,970	354,117	70,693	424,810	93,160	--
Wood (total).....	(2)	237,080	0	(2)	(2)	(2)	(2)	(2)	--
Steam-distilled.....	(2)	194,180	0	(2)	(2)	(2)	(2)	(2)	--
Sulfate.....	(2)	5,410	0	(2)	(2)	(2)	(2)	(2)	--
Destructive-distilled.....	(2)	5,410	0	(2)	(2)	(2)	(2)	(2)	--
Total.....	205,960	708,550	16,771	931,281	594,057	208,464	802,521	128,760	--
1951:	35,600	246,460	19,092	301,152	174,571	67,251	241,822	59,330	.763
Gum.....	93,160	437,500	0	530,660	352,286	43,254	395,540	135,120	--
Wood (total).....	(2)	229,590	0	(2)	(2)	(2)	(2)	(2)	--
Steam-distilled.....	(2)	203,430	0	(2)	(2)	(2)	(2)	(2)	--
Sulfate.....	(2)	4,480	0	(2)	(2)	(2)	(2)	(2)	--
Destructive-distilled.....	(2)	4,480	0	(2)	(2)	(2)	(2)	(2)	--
Total.....	128,760	683,960	19,092	831,812	526,857	110,505	637,362	194,450	--
1952:	59,330	217,360	19,636	296,326	173,084	43,042	216,126	80,200	.534
Gum.....	135,120	347,580	0	482,700	294,635	39,115	333,750	148,950	--
Wood (total).....	(2)	175,090	0	(2)	(2)	(2)	(2)	(2)	--
Steam-distilled.....	(2)	169,560	0	(2)	(2)	(2)	(2)	(2)	--
Sulfate.....	(2)	2,930	0	(2)	(2)	(2)	(2)	(2)	--
Destructive-distilled.....	(2)	2,930	0	(2)	(2)	(2)	(2)	(2)	--
Total.....	194,450	564,940	19,636	779,026	467,719	82,157	549,876	229,150	--
1953:	80,200	177,680	22,830	280,710	156,500	34,880	191,380	89,330	.516
Gum.....	148,950	360,170	0	509,120	348,470	53,070	401,540	107,580	--
Wood (total).....	(2)	193,090	0	(2)	(2)	(2)	(2)	(2)	--
Steam-distilled.....	(2)	164,220	0	(2)	(2)	(2)	(2)	(2)	--
Sulfate.....	(2)	2,860	0	(2)	(2)	(2)	(2)	(2)	--
Destructive-distilled.....	(2)	2,860	0	(2)	(2)	(2)	(2)	(2)	--
Total.....	229,150	537,850	22,830	789,830	504,970	87,950	592,920	196,910	--

See footnotes at end of table.



TABLE 10.--Supplies, requirements, and prices for turpentine, by types; selected crop years beginning April 1, 1930, and annually, 1948 through 1957, (50-gal. barrels)--Continued

Crop year beginning April 1, and commodity and type	Supply				Requirements			Carry-out stocks <sup>1</sup>	Average price per gallon
	Carry-in stocks <sup>1</sup>	Production	Imports	Total supply	Domestic	Export	Total		
1954:	<i>Barrels</i>	<i>Barrels</i>	<i>Barrels</i>	<i>Barrels</i>	<i>Barrels</i>	<i>Barrels</i>	<i>Barrels</i>	<i>Barrels</i>	<i>Dollars</i>
Gum.....	89,330	175,940	15,360	280,630	145,950	50,240	196,190	84,440	.519
Wood (total).....	107,580	441,860	0	549,440	392,150	65,620	457,770	91,670	--
Steam-distilled.....	(2)	207,700	0	(2)	(2)	(2)	(2)	(2)	--
Sulfate.....	(2)	231,750	0	(2)	(2)	(2)	(2)	(2)	--
Destructive-distilled.....	(2)	2,410	0	(2)	(2)	(2)	(2)	(2)	--
Total.....	196,910	617,800	15,360	830,070	538,100	115,860	653,960	176,110	--
1955:									
Gum.....	84,440	149,000	18,441	251,881	133,866	45,845	179,711	72,170	.556
Wood (total).....	91,670	506,540	0	598,210	442,581	56,119	498,700	99,510	--
Steam-distilled.....	(2)	201,270	0	(2)	(2)	(2)	(2)	(2)	--
Sulfate.....	(2)	302,970	0	(2)	(2)	(2)	(2)	(2)	--
Destructive-distilled.....	(2)	2,300	0	(2)	(2)	(2)	(2)	(2)	--
Total.....	176,110	655,540	18,441	850,091	576,447	101,964	678,411	171,680	--
1956:									
Gum.....	72,170	143,830	20,990	236,990	127,160	64,700	191,860	45,130	.555
Wood (total).....	99,510	501,100	0	600,610	430,680	60,450	491,130	109,480	--
Steam-distilled.....	(2)	194,750	0	(2)	(2)	(2)	(2)	(2)	--
Sulfate.....	(2)	305,310	0	(2)	(2)	(2)	(2)	(2)	--
Destructive-distilled.....	(2)	1,040	0	(2)	(2)	(2)	(2)	(2)	--
Total.....	171,680	644,930	20,990	837,600	557,840	125,150	682,990	154,610	--
1957:									
Gum.....	45,000	138,000	21,000	204,000	107,000	45,000	152,000	52,000	.555
Wood (total).....	110,000	492,000	0	602,000	427,000	55,000	482,000	120,000	--
Steam-distilled.....	(2)	181,000	0	(2)	(2)	(2)	(2)	(2)	--
Sulfate.....	(2)	310,000	0	(2)	(2)	(2)	(2)	(2)	--
Destructive-distilled.....	(2)	1,000	0	(2)	(2)	(2)	(2)	(2)	--
Total.....	155,000	630,000	21,000	806,000	534,000	100,000	634,000	172,000	--

<sup>1</sup> Includes CCC loan stocks (beginning 1935). These are gross stocks and include turpentine sold and awaiting shipment.

<sup>2</sup> No breakdown practicable from existing information.

<sup>3</sup> Estimated.

Source: Reports of Agricultural Marketing Service, U.S.D.A., and Bureau of the Census, Department of Commerce.















## DEVELOPMENTS IN HUMAN NUTRITION

by

Ruth M. Leverton, Assistant Director  
Human Nutrition Research Division

and

Faith Clark, Acting Director  
Household Economics Research Division  
Agricultural Research Service

( \* - \* )

For Release

Nov. 19, 1:30 PM

The nature of the changes that have occurred in food consumption in this country over the past 20 years indicates that the recommendations of nutritionists have been an influence in improving the quality of the American diet. Today we will try to sum up what research is telling us about the nutrition situation in this country, and what the emphasis will be in our nutrition education programs that have implications for food production and marketing.

Periodic surveys of the food consumption of various population groups provide us with information we need to appraise dietary levels and to give guidance for nutrition education. The most recent nationwide survey made in 1955 gives us a fairly accurate picture of dietary levels in this country today. Results of this study indicate that the food supplies of families continue to be abundant, varied, and of high quality. If they were distributed strictly according to nutritional needs, every man, woman, and child could be well fed.

Considerable improvement in family diets has taken place in this country in the past several decades. In the 1930's when a large-scale dietary survey was made, a third of the diets was classed as "poor." Today in scarcely more than one-tenth of the households can diets be called "poor" by the standards used in the earlier period. Almost all of this improvement took place between the mid-thirties and the early postwar period.

This dietary improvement has been the result of a combination of several factors. Market supplies have been ample. We have enjoyed economic conditions under which an increasing proportion of people have been able to have the kinds of foods they want. We have had continuing emphasis on research and education in nutrition. The enrichment of bread and other grain products has also had a part in dietary improvement.

### Need for dietary improvement

Despite the generally good picture of dietary adequacy, we still have much to do to bring the quality of all family diets up to recommended nutritional goals. The nutrients in shortest supply are calcium and ascorbic acid. At the time of the 1955 survey three out of ten families had food supplies that furnished less than the amounts of calcium recommended by the National Research Council. One out of four families had ascorbic acid intakes which were below the National Research Council allowance. From 15 to 20 percent of the households had below recommended levels in vitamin A, thiamine and riboflavin. A tenth or fewer had food furnishing less than recommended amounts of protein, iron, and niacin.

Presented at the 35th Annual National Agricultural Outlook Conference,  
November 19, 1957, Washington 25, D. C.

57

On the basis of these findings nutrition education will continue to stress that people should take more care to get enough calcium and ascorbic acid, especially, and also vitamin A, thiamine and riboflavin. In terms of foods, this will mean special emphasis on milk and cheese because they are good sources of calcium and riboflavin, on citrus fruit and tomatoes for ascorbic acid, and on the dark green and yellow vegetables for vitamin A. To increase the thiamine, there will be emphasis on meat, especially pork, whole grain and enriched cereals, dry beans and peas.

Thus the foods for which demand would be especially strengthened as a result of nutrition education are dairy products, excluding butter, and fruits and vegetables. Rough calculations from the 1955 survey indicate that if all those households with less than recommended amounts of calcium in their diets were to consume the recommended amounts, about 9 percent more milk would be needed by households than is now used. A similar calculation for ascorbic acid indicates that about 6 percent more fruits and vegetables would be consumed.

In addition to recommending the so-called "protective foods," and the value of a varied or balanced diet, nutritionists will stress the advisability of limiting the intake of total food energy to a person's need and thus avoiding excess body weight. They will also point out that nutritionally adequate diets can be obtained at different consumer cost levels and at levels requiring different amounts of agricultural resources. In general, however, protective foods are high-resource using foods.

Because few people in the United States are hungry the population in general cannot afford calorie-wise to increase its total food intake. Therefore, if people consumed more of some foods, such as dairy products and fruits and vegetables, then their consumption of some other foods would have to decline, unless they increased their physical activity. Fortunately, food sources of the nutrients now in short supply need not be high in calories.

There is a relationship between family income and the nutritional quality of the diets. This means that some families have economic limitations on the choices of foods they can make. Higher income, however, is no guarantee of nutritional adequacy. Many families with higher income have diets that fall short of recommended nutrient levels. In 1955 one out of four of the families in the highest income third of the Nation had diets in need of improvement in calcium; one out of six in ascorbic acid. This and other findings indicate the need for more effective education of individuals and of homemakers in family food management.

#### Convenience foods

We hear too much about the increased use of convenience foods--foods that take relatively little time to prepare at home--but the average family food budget is by no means made up entirely of such foods. We have estimated



that in 1955 about 28 percent of the total expense for food at home of city families went for a list of so-called convenience foods--foods with varying degrees of built-in maid service. Farm families as well as city families buy the common convenience foods often used for quick meals. Until more specifications are set for the composition of many of these products, there is the danger that the amount and nutritional quality of the food ingredients are being slighted and an undue portion of the money going to pay for service. With as much as 28 cents of each food dollar going for foods with built-in maid service, more attention will need to be given to standards which will insure that the food is supplying its share of the family's nutritional needs. Progress is being made in setting specification of composition for many such products.

#### Fat in household food supplies

The survey results offer considerable information on the amounts and kinds of fat brought into the home. Because of the widespread interest in fat these results will be discussed separately. The periodic food surveys made by the Department of Agriculture indicate that the proportion of fat in household food supplies has increased during the last 20 years. In 1936 only 38 percent of the calories in the household food supplies came from fat. In 1955, 44 percent of the calories were supplied by fat. This increase came chiefly from the greater consumption of meat, poultry, and fish and the smaller consumption of grain products and potatoes in 1955.

These figures for available fat do not include any deductions for food discarded in the kitchen or as plate waste. It is quite likely some fat is discarded. However, studies of the quantitative food intakes of many hundred adults of all ages indicate that the proportion of calories from fat in their self-chosen diets is usually as high as 40 to 42 percent.

It is important for us to realize that a large share of the fat in the United States diets enters the kitchen as part of other foods--foods which are not usually thought of primarily as sources of fat. In 1955, meats, poultry, and fish provided 27 percent of the total; milk and milk products (other than butter), eggs, baked goods, and nuts provided 33 percent; and only 40 percent of the total dietary fat was furnished by visible fats and oils, including bacon and salt pork.

The amount of fat available for consumption is higher in farm than city food supplies. Among city families it is higher in the diets of the rich than the poor. It tends to be higher in the West than in the Northeast. The sources of fat are somewhat different in the South from those in the other major regions of the United States. Less of the fat in Southern food supplies comes from dairy products and meat, poultry and fish, while the share from bacon and salt pork is much larger. Fats used for home baking, especially lard, are more important as sources of dietary fat in the South than in other regions.

59



## Dietary fat and health

No present-day discussion of food and nutrition seems complete unless it includes a consideration of fat and its relation to health, the topic-of-the-year. Unfortunately, this topic has been subject to inaccurate, hastily-formed conclusions which have created confusion and even anxiety in the mind of the public. The presumed direct relation between the fat content of the American diet and the occurrence of certain kinds of heart disease and atherosclerosis (the deposits of fatty material along the inner lining of the walls of the arteries) is still in need of many supporting facts from scientifically conducted research.

The proven facts about fat can be discussed from the standpoint of:

1. What is known about the body's need for fat?
2. Why is there concern about the kinds and amounts of fat in our diets?
3. What sound recommendations can nutritionists make?

### 1) What is known about the body's need for fat?

Fats are an important kind of food for all of us. As well as adding variety and flavor to many foods, fats are carriers of vitamins A and D, concentrated sources of energy, and suppliers of substances called fatty acids which are essential for growth and health. Also, in the utilization of food-stuffs, fats spare protein so that protein is available to perform its specialized functions. Within the body, fat tissue is important for the support, protection, and insulation of vital organs and areas. The complicated role of fat in nutrition is just beginning to be recognized and much more needs to be learned about the amounts and kinds of fats required for optimum health. Perhaps it is well to remind ourselves that we do know that fat is a normal constituent of our food, and the body's use of fat for fuel is a normal process.

One substance of particular importance which occurs in some fats is linoleic acid. It is called an essential unsaturated fatty acid. (A fatty acid is part of a fat molecule.) This is needed for the performance of vital functions in the body, such as maintaining the skin in a healthy condition. There is the possibility that a deficiency of linoleic acid interferes with the body's normal use of fat and that the proportion of linoleic acid to the saturated fats in the diet is important. Because the body cannot manufacture it, linoleic acid must be supplied by the food we eat. Common foods which contain appreciable amounts of linoleic acid are the natural oils from corn, cottonseed, and soybean. Peanut oil and poultry fat have lower content, olive oil and pork fat still lower. The fats of beef, veal, lamb, milk, and cocoanut oil contain very little linoleic acid. Margarines and the usual man-made shortenings differ widely in linoleic acid content, depending on the raw materials used and the extent to which they are hydrogenated.

2) Why is there concern about the kinds and amounts of fat in our diets?

There has been some indication that fat is one of the dietary factors involved in the increase in the number of cases of atherosclerosis and some kinds of heart disease in our population. This is based on such items as the fact that atherosclerosis and heart disease occur more frequently in countries where the food supply is abundant than where the food supply is limited. An abundant food supply usually includes a generous amount of fat. As a country we have the highest death rate from heart disease, but also we have more people in the older age groups. There is the probability that arteriosclerotic heart disease is written on the death certificates of many elderly persons, not because it has been clearly diagnosed, but because there is no discernible active disease, such as tuberculosis, pneumonia, etc. For this reason reported increases in the number of deaths from heart disease could be suspect.

Recently the Nutrition Committee of the Council on Community Service and Education of the American Heart Association studied all of the available data and reported to the American Heart Association and the American Society for the Study of Arteriosclerosis. The Council on Food and Nutrition of the American Medical Association authorized this report for publication in its Journal. Certainly no report could have better origin or ancestry. After reviewing the evidence on the subject of fat as related to heart disease, the conclusion was reached that in the studies made so far, the role of fat cannot be separated from other factors, such as total caloric intake, other nutrients, relative rate of caloric expenditure, exercise, and obesity.

One of the authorities in this field, Dr. Wendell Griffith, writes also in the Journal of the American Medical Association somewhat more cautiously--"Until a clear-cut solution of the problem of the prevention of arteriosclerosis and of its sequelae is forthcoming, it seems wise to assume that a faulty diet may be one of the causative agents. Whether or not dietary fat is, in some fashion, the culprit remains to be proved."

Because cholesterol has been the substance most talked and written about in connection with fat and atherosclerosis, we need to consider a few facts about it. Cholesterol is a fatty material which is synthesized in the body and is a normal constituent of the blood. It is used in making physiological substances which are important in the functioning of the body. A high concentration of cholesterol in the blood may result from faulty metabolism and this has been blamed for causing atherosclerosis and leading to heart attacks. The scientific evidence for this, however, is far from conclusive.

The amount of cholesterol in the food we eat does not necessarily determine the amount of cholesterol in the blood. The body can make cholesterol whether or not there is cholesterol in the food. Low cholesterol diets have received considerable attention in the treatment of certain conditions but the extent of their usefulness has not yet been clearly established. A low cholesterol diet limits the selection of highly nutritious foods and could lead to an imbalance or deficiency of nutrients.

19



The amount of cholesterol in the blood of normal persons varies within wide limits. Not all persons with more than average amounts of cholesterol in their blood have atherosclerosis, and not all persons with atherosclerosis have more than average amounts of cholesterol in their blood.

There is some evidence that fats with a high content of linoleic acid may help to lower blood cholesterol levels. However, we lack evidence that lowering blood cholesterol reduces the occurrence of atherosclerosis.

Cholesterol is present in varying amounts in foods of animal origin. It is relatively high in such foods as egg yolk, butter, variety meats (liver, kidney, sweetbreads), fat fish, oysters; fairly high in meat and cheese; and is lower in such foods as lean fish, egg white, skim milk. Substances closely related to cholesterol are present in foods of plant origin such as grains, fruits, and vegetables.

To most of the questions which seek specific information in the intricacies of fat requirement and metabolism, the effect of different processing procedures on the nutritive value of fats, and the relation of fat to heart disease we must say, "We do not know." We must not add to the present confusion by trying to give answers to everything, before the right answers are known. Certainly before too many more Outlook Conferences basic research will have provided facts upon which to base right answers and sound recommendations.

3) Finally, what recommendations can the nutritionist make at this time?

We have an obligation not only to keep people as well informed as the facts permit, but also to keep their confidence in our efforts to serve them even though we do not have some answers to the question. Only in this way can we help people to refrain from soliciting or embracing information from unreliable sources.

Now to answer the question "How can we use the scientifically accurate information that is available to date to maintain and improve our health?" In general, we can say that at this time the evidence does not justify a radical change in the kind or amount of fat in the American diet in the hope that by such means the incidence of coronary or cerebral artery disease will be lowered. However, persons with a family history of early deaths from cardiovascular disease may have special diets suggested by their physicians. We should remember that atherosclerosis and coronary heart disease are clinical problems. Diets prescribed for the treatment of disease should not be confused with diets a healthy person can and should eat.

More specifically, nutritionists recommend that people should eat a "balanced diet" using a variety of foods--neither omitting any one kind nor over-emphasizing any one kind. "On the basis of the survey results



discussed earlier, milk, fruit and vegetables are more in need of emphasis than other food groups. Some emphasis but less than on milk, fruit, and vegetables will be placed on meat, grain products, eggs, dry beans and peas.

We urge people to avoid overeating for their level of physical activity and thus avoid excess calories and overweight. This means choosing liberally from the foods which supply many nutrients in relation to their caloric content, and limiting the intake of foods which provide little except calories. Weight needs to be kept within desirable limits for health at every age. Fortunately, the foods which are needed to improve the nutritional quality of present-day diets are low in calories in relation to the other nutrients they supply.

Surely you will agree that our present knowledge offers plenty of challenge for action. Research is continually adding to our knowledge of nutritional needs and the nutritive values in foods. Much research is in progress on the effect of variety, culture, handling and transportation practices, methods of storage and preparation on the nutritive value, quality, and flavor of food. Special attention in research is also being given to the interrelationships of the body's requirements for different nutrients and the quantitative relationship of nutrients in different foods. The practical results of such research will gradually be applied to improve the Nation's food and the Nation's health. But as in the past, it will require the concerted efforts of research, education, and those responsible for producing our food supply and delivering it to the kitchen doorstep.



UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Marketing Service

DOMESTIC MARKET DEVELOPMENT  
AND THE OUTLOOK FOR FARM PRODUCTS\* ✓

Robert M. (Walsh, Chief, Market Development Branch

If we take all prognostications seriously, by 1960 or 1965 we shall be a nation largely of supermarket shoppers, addicted to self service, large parking lots, air conditioning, soft music, pastel colors, and pleasant landscapes in our weekly visit to the food mart. We shall, in addition, have been offered several thousand new food-product and packaging innovations. And we shall be subjected to increasing persuasion to buy through ingenious methods of advertising and other promotion.

We have entered the age of mass merchandising of farm products. What are its characteristics, and what does it mean to farmers, marketing agencies, and consumers? I propose to discuss these questions under several headings, namely, merchandising innovations, product innovations, and innovations in advertising and promotion, and then conclude with a few remarks on consumption trends and on the meaning of the many changes that are under way or in prospect.

Merchandising innovations

Merchandising innovations are manifest in many ways in the domestic food market. I think it is safe to say that the U. S. leads all countries of the world in this respect, although some innovations, perhaps different in nature, are being introduced on a limited scale in a few other countries, and many of the U. S. innovations are beginning to take hold abroad.

Our retail food establishments are being transformed--food stores are becoming fewer but larger. Significant changes are occurring in wholesaling. Complete, convenient, and uninhibited self service is rapidly being achieved, not only by the wide variety of high-quality food items to be found under one roof, but also through replacement of sales clerks by prepackaged, preweighed, and prepriced items attractively arranged throughout the store. Consumer convenience is further satisfied by use of day-and-night automatic food vending machines outside the food store.

These are the marks, perhaps, of prosperity, but most of today's developments are likely to persist in recession years, mainly because they represent steps toward greater efficiency through mass distribution of foodstuffs to a rapidly expanding and internally migrating population.

\*Presented at the 35th Annual National Agricultural Outlook Conference, November 19 (p.m.), 1957, Washington 25, D. C.

77



Twenty or 30 years ago shopping for food required visits to food stores of different kinds. Specialty shops still exist, especially in large cities. But their importance has been overshadowed by the rise of large grocery stores carrying a complete line of food and containing departments for virtually all food commodities. In 1954, general grocery stores, as distinguished from specialty stores, accounted for 87 percent of the dollar sales for all food stores.

According to Census information, the total number of food stores in the country declined from 561,000 in 1939 to 385,000 in 1954. Average annual sales value per store increased from \$18,000 to \$103,000. Total volume of food-store business increased from \$10 billion to \$38 billion over the 15-year period.

The number of independent stores dropped 33 percent from 1939 to 1954, while the number of chain stores declined 52 percent.<sup>1/</sup> All of the decline was in the many thousands of smaller stores.

Both independents and chains have laid great stress in recent years on the large food store. Among independents the number of food stores doing \$300,000 annual business and over increased 17-fold between 1939 and 1954; among chains the increase was 9-fold. However, the chains started from a larger base and tended to emphasize the "colossal" super-market more, with the result that the average sales volume per store in the \$300,000-and-over class in 1954 slightly exceeded \$1,000,000 for the chains but was less than \$650,000 for the independents.

Fifty-two percent of total food-store business was in stores grossing over \$300,000 a year in 1954. In chains 92 percent was in stores of this size, while only 26 percent of the business of independents was in stores with gross sales over \$300,000. The number of small and middle-size stores among the independents is still relatively large. On the other hand, there were 14 times as many independently-owned stores as chain stores in operation, and the independents commanded 61 percent of the total food-store business. The percentage of total business for independent stores, nevertheless, has been decreasing; in 1939 it was 67 percent and for 1957 it is reliably estimated to be 60 percent.

Supermarkets as defined by the trade include all stores doing a minimum of \$375,000 business annually. This differs somewhat from the Census category with which we have been dealing. According to trade sources, the number of supermarkets more than trebled between 1940 and 1954, with a further increase of 20 percent occurring between 1954 and 1956.<sup>2/</sup> Volume per store also increased. In terms of constant dollars (1940 = 100), sales per supermarket, on the average, were 36 percent greater in 1956 than in 1940.

<sup>1/</sup> Chains are defined as corporate managements operating 4 or more stores.

<sup>2/</sup> "Super Market Boom," Super Market Merchandising, April 1957.

The above increases in sales also reflect the addition of nonfood items to the shelf space in food stores. A survey of chain organizations by the National Association of Food Chains in 1957 revealed that the addition of nonfood items such as hardware, houseware, appliances, and so on, contributed 2 percent of total chain store sales in 1952, and 5 percent in 1957. The retail margin on such items has been running considerably higher than on food items, averaging around 33 percent of retail sales value compared with about 18 percent for foods.

Changes in numbers, sizes, and characteristics of food stores have not been accomplished without numerous changes in management. The 3 national chain-store organizations have decentralized their operations; many local and regional chains have grown through acquisitions and mergers both with independent stores and other chain organizations. If we exclude 2- and 3-store chains, which usually are classified as "independents," the number of companies managing chain stores declined about 5 percent between 1953 and 1957. On the other hand, the number of 2- and 3-store "chains" increased 25 percent. Many of these 2- and 3-store "chains" contain large supermarkets and constitute single-city phenomena; they frequently include their own warehousing. There were over 800 corporate chains of 4 stores and over in 1957, and, in addition, there were at least 2,500 corporate managements operating 2 to 3 stores each.<sup>3/</sup> This, with the large number of independent stores, seems to offer plenty of room for competition in food retailing. That the "independents" have been able to maintain as large a share of the food market as they have has surprised many observers. Independents have introduced innovations of their own, including not only the 2- and 3-store operation, but also the so-called voluntary chains, and even the supermarket itself which was pioneered by an independent retailer on Long Island, N. Y., in 1930.

Despite the many possibilities for direct buying by chain-store managements from producers and processors, the food wholesaling function apparently has not diminished greatly in importance. The dollar volume of food wholesaling increased more rapidly from 1939 to 1948 than the dollar volume of retailing. However, since 1948 gains in wholesale volume have been somewhat less rapid than gains in retail volume. Most of the failure of wholesaling volume to expand as rapidly as retail after 1948 is found among wholesalers specializing in dairy, poultry, and poultry products; and in fresh fruits and vegetables. Dollar volume for these 2 important classes of wholesalers increased only 5 and 3 percent, respectively, from 1948 to 1954. Dollar volume for all retail food stores, on the other hand, increased 36 percent over the same period.

Partially offsetting the decline in relative importance of wholesaling dairy, poultry, and fresh produce items, certain specialty lines of wholesaling have increased rather substantially since 1948. These include canned foods; coffee, tea, and spices; frosted and frozen foods; and soft drinks. Fish and sea food distributors also experienced a substantial growth.

<sup>3/</sup> "Travis--Voice of the Customer," National Association of Food Chains, June 1957.

15



The age of mass merchandising coincides with the age of suburban development. Without a rapidly expanding suburbia it probably would be impossible to have food supermarkets springing up on a grand scale. Congested urban areas have congested streets, limited parking space, and in apartment districts restricted home food-storage facilities. The specialty food store is most usually found in this environment.

Convenient locations in suburban areas are being converted from fields and pastures to supermarkets, and indeed to complete shopping centers. The complete suburban shopping center is an even more recent development than the supermarket. It typically offers at least two suburban branches of large down-town department stores and a number of other stores such as drug, hardware, bakery, and general grocery. One and sometimes two food supermarkets are an essential part of the plan. One authority has estimated that there were 1,000 such shopping centers in operation in 1955, with 2,000 more under construction or being planned, which gives a total equivalent to nearly one to every county in the United States.

Mass merchandising of foodstuffs is not confined to supermarkets. Automatic food and beverage vending machines are now found in virtually every transportation terminal, and in many factories, schools, offices, and gasoline stations. The number of machines in operation in 1956 was 3.2 million, according to the magazine, Advertising Age.<sup>4/</sup> It is predicted that there will be nearly 4 million machines by 1960. This 2-billion dollar industry is expected to hit nearly 3 billion dollars by that year. Major innovations are foreseen in machines that will produce freshly-brewed coffee, in outdoor machines to sell grocery staples day and night, and even in completely automatic drive-in restaurants.

The urge toward greater convenience, variety, and palatability in foods among American consumers today (arising from shortages in domestic help and from higher real incomes) finds expression in additional ways. One is in increased dependence on restaurant meals. Another is in ready acceptance of product innovations, including innovations in packaging.

According to the most recent national food consumption survey conducted by USDA, approximately 19 percent of urban household consumer expenditures for food was for food consumed away from home in 1955. This compares with 16 percent in 1948.

Prepackaging is one of the most-talked-of items in food retailing today. Super Market Merchandising in its November 1956 issue reports that 5 percent of all fresh fruits and vegetables sold were prepackaged in 1950 and 20 percent in 1956, and predicts that 50 percent or more of fresh fruits and vegetables will be prepackaged by 1960. The major advantage cited is low spoilage of perishables with less handling. This is confirmed by some of our own experiments in retail stores. Prepackaging also permits self service, and in many cases the elimination of one or more clerks now bagging and weighing the produce.

<sup>4/</sup> Dec. 10, 1956.



The sharp rise in prepackaging of fresh produce is significant to farmers. First reaction is to say it costs more. This is not necessarily true. Reduction in spoilage and in store labor are offsetting factors. Moreover, as a general rule, farmers receive higher returns for food products sold in the fresh market than those sold for processing.

### Product innovations

Changes in package forms are not confined to fresh produce. We find meats being packaged, weighed, and priced in the back room for quicker access by consumers in their weekly shopping trips. New outer wrappings are found on boxed merchandise, with colorful new labels. And the number of brands and of package sizes has multiplied to the point where many supermarkets now carry up to 6,000 different items on their shelves. This is one form of product innovation. There is another form of product innovation, wherein the properties of the food products are modified in such ways as to produce greater convenience in use, greater economies, greater storability, and improved quality.

To illustrate the magnitude of developments in this field I would like to cite a release issued by one of the large food processing and distributing firms last June announcing the opening of a new research center. It was stated that new products developed or acquired by the firm since World War II accounted for 36 percent of its net sales in the year ended March 31, 1957. Most of those products were developed in the corporation's laboratories. This experience has been duplicated, with varying results in terms of net sales, by virtually all of the large food processing and distributing firms.

For the individual firm, product innovation is a major competitive weapon. This can be readily visualized in the battle of the cake mixes. For the consumer, an ever-increasing array of food choices is presented with items offering new conveniences, new flavors, new out-of-season foods, improved qualities, and even lower prices. For the agricultural producer a greater variety, number, and stability of outlets is offered for his products. And for the economy as a whole, product innovation is a key element in continued growth, sparking new demands and leading to further gains in living standards.

The products of agriculture are in competition with products of other industries for their share of the consumer's dollar. And product innovation is an essential part of that competition. Fortunately for agriculture, food producers and processing and distributing firms have been aggressive in this field.

A few examples will serve to illustrate this point. Some of the more familiar new products may be passed over quickly--frozen vegetables, frozen fruits, frozen concentrated juices, frozen pies, precooked frozen dinners, prepared cake mixes and frostings, and eviscerated poultry.

77

Let us take a look for a moment at one of the large family of dairy products, namely, nonfat dry milk. This product was developed in 1920 but was unknown to most American homemakers as recently as 10 years ago. Since then, aided by further improvement in 1953 in making the product "instantly" soluble even in cold water, household use reached the 150-million-pound mark in 1956, roughly equivalent to 750 million fluid quarts or 1.5 billion pounds annually of skim milk. This increase has not been at the expense of other dairy products with the possible exception of evaporated milk to a minor extent. Off-farm consumption of fluid skim items--plain skim, flavored drinks, and buttermilk--also moved up, and research to date indicates that nonfat dry milk in the household tends to supplement rather than displace fluid milk. The success of nonfat dry milk in expanding the market for dairy products has given a push to further work on milk concentrates, both dry and liquid. Within the past 2 months, USDA utilization research specialists have uncovered a storable modified sweetened cream which may have further repercussions on the domestic and export market outlook for dairy products.

Vast changes have occurred in the poultry industry with the development of a broad market for broilers and fryers. Total poultry meat consumption increased from 17 pounds per person in 1940 to 29 pounds in 1956. Broiler consumption rose from 2 pounds to 16 pounds over the same period, more than accounting for the total increase in poultry meat.

Much has been said and written about consumer preference for leaner pork cuts, and the development of a meat-type hog to meet that preference--also to reduce hog-production costs. Demand for pork has declined substantially in relation to demand for beef over the past 10 years. One of the contributing factors apparently has been the excessive fattiness of pork, which most consumers regard as wasteful of their purchasing power. The American Meat Institute on July 1 this year urged immediate adoption of a more selective system of buying hogs on a "merit basis." This is a powerful influence, since the AMI represents the collective thinking of all the bigger meat packers as well as many of the smaller ones. The statement is made that more lean cuts in the total pork supply will improve consumer demand for pork. Enhancing the demand for pork is an important objective, since hogs represent not only a substantial source of income for many farmers but also the largest single outlet for corn. The USDA and several of the State experiment stations are supporting the drive toward greater production of meat-type hogs, and the payment for such hogs on a "merit basis." This is an interesting development in product innovation, in that improved quality of product is stressed and the success of the enterprise requires full cooperation up and down the line of producers, processors, and distributors. If ultimately successful, as seems likely, consumer satisfaction will be increased and hog producers will benefit from increased net returns from the hog enterprise. Corn producers are likely to benefit also.

Two potentially new developments now loom on the horizon. One is in dehydrated products which suffered from premature use during World War II, and the other is in dehydrofrozen and dehydrocanned products. Dried eggs are now vastly improved over the war-time variety, and they



are finding wide application in food-manufacturing industries and in institutional outlets. Dried onions also have interesting possibilities. Recent experiments in the laboratory and in the market have revealed promising potentials for dehydrated potatoes, of both high- and low-solids content. Dehydrofreezing and dehydrocanning are new processes still being explored at the Western Utilization Research Laboratory. Essentially the process consists of reduction in product weight by approximately one-half through removal of a major part of the water before freezing or canning. Quality is well maintained, and significant economies are possible through reduction of shipping and storage weights. Dehydrofrozen pimentos are now being used in the cheese industry and dehydrofrozen apples in commercial pie baking. Recently the Market Development Branch of AMS tested use of dehydrofrozen peas in 100 Milwaukee restaurants with encouraging results. Additional technological improvements and trial commercial runs will be necessary, however, before a complete line of dehydrofrozen products will be available for commercial distribution. Dehydrocanning has not reached a comparable stage of development.

Another important aspect of product innovation is found in nonfood, industrial uses of farm products. Interest in this subject is highlighted by the report last spring of the President's Commission on Increased Industrial Use of Agricultural Products to the Congress, and by the hearings held before a Congressional committee on bills relating to this subject. The need for increased research on new industrial outlets was stressed not only because of the general agricultural surplus situation, but also because of sharp inroads being made in traditional agricultural markets by materials of nonfarm origin. Chemical technology, as employed by private firms, is no respecter of sources of raw materials. Synthetic fibers--the rayons, nylons, Orlon, and others--have become extremely important competitive factors in marketing cotton and wool. Similarly, the inedible fats and oils, despite gains in certain chemical uses and in animal feeding, are being largely displaced in the detergent field by petroleum derivatives, and are feeling the impact of synthetic resin latexes (styrene butadiene, polyvinyl acetate, and acrylic resins) in the paint, varnish, enamel, and other protective-coatings field. The result has been to force more of our traditional crops and animal byproducts into uncertain export channels.

In sum, product innovation in food markets has been aggressive and fully as competitive for the consumer's dollar as innovation in other markets. But in the industrial-use field agriculture seems to be fighting a rear-guard action. A major break-through in fundamental knowledge of the physical and chemical structures of farm products may be needed if significant new industrial uses are to be opened up.

#### Innovations in advertising and promotion

And now a few words on recent innovations in advertising and promotion. Advertising today is a 10-billion dollar enterprise, and additional hundreds of millions are being spent annually on dealer-service activities, in-store promotions, public relations, and supporting

79



research. Advertising of food products accounts for one-sixth to one-fifth of the total bill, and additional amounts are spent for alcoholic beverages, textile products, and tobacco.

Most food advertising is sponsored by processors and distributors, but direct sponsorship by farmer groups apparently is on the increase. No precise information is available on the extent to which farm groups are sponsoring advertising directly through organizations such as Sunkist Growers, the American Dairy Association, the Florida Citrus Commission, the American Sheep Producers Council, the Red Cherry Institute, and many others. The Marketing Research Division of AMS is taking steps to develop such information.

In any case farmers share the advertising cost with consumers whether they participate directly or not. It can be shown that a marketing charge, under competitive conditions, will be shared about equally through increased prices to consumers and decreased prices to producers if the elasticities of supply and demand are approximately equal. If supply is less elastic than demand (less responsive to price change), more of the charge will be borne by farmers. The latter is the more typical situation for most farm-produced commodities. Offsetting benefits will depend on the extent to which demand can be strengthened. Here again knowledge is very imprecise and in discussing the question of benefits from advertising we are reduced to rationalizing from limited information. In market development research here in the Department we are undertaking a series of studies to evaluate the benefits that may be derived from advertising specific farm products, but it may be quite a while before any major conclusions are reached. One thing is inescapable, however. Whether farmers want it or not they are participating on a large scale in the advertising venture.

Total expenditures for advertising grew from 2.1 billion dollars in 1940 to an estimated 10.2 billion dollars in 1957, according to Printers' Ink. This represented a rate of growth about double that for the Gross National Product.

Aside from the growth factor, perhaps the most outstanding development in advertising in recent years has been in copy preparation. Advertisers are now relying heavily on consumer studies to determine what consumers want, what they like and dislike, what habits affect their purchase decisions, where they fall short in good nutrition or variety in food choices, and what they think and do about competitive items. Information of this type provides a much sounder basis for selecting advertising themes than existed a few years ago. And I suppose we can say that advertising is coming more directly to the point, and is becoming more plausible and even more subtle in its persuasiveness than in the past.

#### Consumption trends and conclusions

Now, what can we say about the effects of all these activities in mass merchandising, product innovation, and advertising and other promotion on the outlook for farming? First, let us take a look at what has happened to the consumption of farm products.

In terms of retail weight, consumption of food per person in the United States, at something over 1,500 pounds annually, is almost the same today as it was in 1939. However, there are more protective nutrients in the poundage--more protein, more minerals, and more of some vitamins. The change in nutrients accompanied significant shifts in the kinds of food we eat. Consumption of cereal products and potatoes is about 100 pounds per person less than in 1939; consumption of dairy products excluding butter, and of meat, poultry, and eggs, on the other hand, has risen by an equal amount. Total consumption of fruits and vegetables is nearly the same per person as in 1939, but the form has changed with a rapid rise in processing. These shifts may be attributed chiefly to rising real incomes and the tendency of consumers with money available to purchase more expensive foods offering greater palatability and year-round availability.

A more positive indication of the effects of merchandising, product, and advertising innovations may be found in agriculture's share of the market. Share-of-the-market is no idle term in the businessman's lexicon. In a competitive economy it is a vital statistic second in importance only to the profit statement. Despite the many conveniences and services added to farm products for the benefit of consumers, the farmer's share of the food dollar, at 40 percent, is as high today as it was in 1939. This would indicate that increased costs resulting from greater processing, packaging, and other servicing of food products have been offset by increased efficiencies made possible by mass merchandising techniques. Moreover, the food dollar now represents a larger share of the consumer's income than 15 or 20 years ago. In 1939, expenditures for food accounted for 22 percent of consumer disposable income; for 1957 food expenditures are estimated at 25 percent of income. This increase is surprising in light of the 19th century principle that the percentage of income spent for food declines as income rises. It is not surprising, however, in light of the more highly nutritional foods being consumed, the many services and conveniences that have been added to food products, and the aggressive merchandising job that is being done. One may wonder what our farm situation would be like if the same "market basket" of foods and services were purchased today as in 1935-39. It is estimated that purchases on that basis would require only 16 percent of the consumer's disposable income.

\*\*\*

\*

81





## Annual Agricultural Outlook Conference

Panel Discussion

November 18, 1957

FOR RELEASE  
NOVEMBER 18  
P.M.

## THE ECONOMIC OUTLOOK FOR 1958

by

Gerhard Colm, Chief Economist,  
National Planning Association

If one analyses the current trend in consumers purchases, business investments, government outlays, and net export one may well reach the conclusion that the outlook for 1958 is one of a sidewise movement of economic activities. According to present surveys and indications, consumer purchases, residential construction, and government (Federal, State and local) expenditures may show a slight upwards movement offset by a probable decline of business investments in plant and equipment and of net exports. As the general level of activities has been high, the prospect of a sidewise movement does not appear especially alarming.

Projecting the economic outlook on the basis of present trends however, should be only the first and not the final step in an analysis of the economic outlook.

A prolonged sidewise movement may in itself affect consumer and business behaviour so as to change their present intentions. A sidewise movement in an economy of growing capacities and of a growing labor force will result in a rise in idle plant and equipment and an increase in unemployment. A rise in idle capacity in turn may induce business to curtail investment programs still further while an increase in unemployment may lead consumers to adopt an attitude of greater caution in consumer expenditures. A prolonged sidewise

movement, therefore, may well lead into an economic contraction.

However, even this second step in our analysis does not mean that we have reached our final conclusion. Faced with the threat of an economic contraction the government will not sit idly by. A shift in credit policy and increased financial support for residential construction would be the most likely first steps to counteract a possible economic downswing. Then, too, tax policies would likely be re-examined considering the possibility of an increase in defense spending and in budget expenditures on the one hand, and the requirements for promoting continued economic growth on the other. If it should become necessary to step up defense expenditures substantially there may be no need for adopting any anti-recessionary fiscal measures, such as tax reduction or a speed up in nondefense expenditures.

In summary, the threat of an economic contraction must be taken seriously. In the face of an inadequate rate of growth in the economy a relaxation of credit restraints is to be expected. How far other fiscal policies will be needed to offset a contraction and promote renewed expansion cannot be foreseen until the additional defense needs are determined and the economic outlook has been further clarified. With the availability of these policy devices I see no reason for expecting a prolonged or severe contraction.

UNITED STATES DEPARTMENT OF AGRICULTURE  
Foreign Agricultural Service

FOREIGN MARKET DEVELOPMENT

By Raymond A. Ioanes  
Deputy Administrator, Foreign Agricultural Service

Five years ago we met here at the 30th Annual Outlook Conference. In that 1952-53 fiscal year the value of our agricultural exports dropped to \$2.8 billion, the lowest total since the war. Much concern was being expressed at the turn of events. With farm production at a record level, it was no time for exports to be down.

Since then, our agricultural exports have been gaining steadily. Not only have they recovered but they have set new records. The \$4.7 billion export figure of this past fiscal year reflects an improvement of 67 percent.

Before getting into reasons for this recovery, let's see what these expanded exports mean to American agriculture:

Last year we exported the equivalent of over half our production of wheat, cotton, and rice; one-third of our production of soybeans and tobacco; one-half of our tallow production, and one-fifth of our lard.

The equivalent of 61 million acres -- or one acre out of every five -- produced for export.

Of the \$10.5 billion of agricultural products that moved out of the Commodity Credit Corporation inventory during the past four years, over 70 percent went to foreign consumers.



This export recovery was due largely to a vigorous new effort of foreign market development. In this work, agricultural and trade groups and the government, individually and collectively, have played important parts. As a result, American agriculture today is equipped with the greatest array of foreign marketing aids that it has every had.

The foreign market development work of these five years, though it has a number of different aspects, falls into three general groups:

First, we have had a general strengthening of existing export programs and efforts;

Second, special government programs have been set up to aid the financing of agricultural exports;

Third, government and industry are cooperating in joint projects to publicize and promote our farm products abroad.

Let's take a look at each of these groupings.

#### Existing Programs

When this big job of rebuilding American agricultural exports was undertaken, about the first thing that became apparent was that our agriculture, as a whole, was not highly export-conscious. Exporting of farm products during and immediately after the Second World War was easy. Foreign people needed our food and fiber and held out their hands to get it. Our military and foreign aid programs paid a big part of the bill. By and large, we had fallen into the habit of taking exports for granted.

By 1952-53, however, certain facts of life had become obvious: (a) foreign agricultural production had recovered and our products faced strong competition in the world market; (b) U.S. foreign aid was tapering off and henceforth would pay for smaller exports; (c) many foreign people who wanted our products couldn't pay in dollars; and (d) the higher price tag on some of our farm products kept them from competing in the lower-priced world market.

Some of those first actions that were taken are now in the past, but let's recall what they were.

A first action was to convert the Department's former Office of Foreign Agricultural Relations into an action agency. OFAR had been a staff office for research and analysis, whereas the new Foreign Agricultural Service was given primary responsibility for aggressive promotion of exports.

Next, the agricultural attaches, who had been under the wing of the Department of State, were brought back to the Department of Agriculture where the Congress felt they could make their most effective export contribution. Also, the attache service was expanded so that today we have 77 agricultural attaches stationed abroad, representing American agriculture.

We set up a more active program of foreign marketing specialists. During the past several years these men have literally been combing the far corners of the earth in search of marketing opportunities.

We rebuilt our world reporting, our analysis, and our publications to insure that they presented the kind of information needed by Americans having a stake in foreign agricultural trade.

And, finally, we increased our pressures against foreign governments to get them to reduce the many trade barriers set up against American farm products. This is very important. There is a strong tendency for foreign countries that are short of dollars to limit their imports of our farm products and instead use their scarce dollars for buying non-agricultural products. Much work has been done with these countries, both through direct negotiation and through the trade agreements program (GATT), to get them to lower such barriers. We have been having some success. Today 80 percent of our agricultural exports are going to countries with whom we have trade agreements, and two-thirds of such exports move under concessions granted us.

85

### Special Programs

An important part of our high-level agricultural exports is directly due to the special programs provided by the Congress, especially the well-known program Public Law 480. Forty percent of the \$4.7 billion export figure for this past year can be traced back to programmed movements under barter, charitable donations, or sales of surpluses for foreign currencies.

Of these programs, probably the one talked about the most is Title I of Public Law 480, the foreign currency sales program. This is the program's fourth year of operation. From its beginning, through this fiscal year, \$4 billion of funds have been provided to finance the selling of farm surpluses for foreign currencies. Thirty-three countries have taken part to date. The program is being administered carefully to make sure that what we sell these countries for their own currencies is in addition to what we might reasonably expect them to buy for dollars. Almost one-fifth of last year's agricultural exports moved under the Title I program.

Titles II and III of Public Law 480 have features that enable us to share our surpluses with needy foreign people. Last year, nearly a quarter of a billion dollars worth of surpluses were given to foreign people who either were in desperate economic circumstances or were victims of disaster. Various good will organizations are active in administering this sharing, including the Red Cross and many church organizations. I might add that these programs of charity not only have provided a useful additional outlet for our farm products but have been important in building foreign friendships.

A substantial contributor to exports is the policy of the Commodity Credit Corporation to move surpluses into export at competitive world prices. Export



payments to bring prices down to the world level last year averaged around 80 cents a bushel for wheat and 7 to 8 cents a pound for cotton. Except for competitive pricing, it would not have been possible this past year to export 6.6 million bales of cotton, the most in a quarter of a century.

Then, of course, there also are the programs of credit. Both the Export-Import Bank and the Commodity Credit Corporation have active programs to finance the exporting of U.S. farm products.

The larger of these two is the credit activity of the Export-Import Bank. A current example of its activity is a \$175 million loan to Japan, to finance Japan's purchasing of cotton, wheat, barley, and some other products from the United States. A smaller example, though closer to home, is the Bank's recent financing of \$10 million of U.S. breeding cattle being purchased by Mexico.

The credit programs are different from the others mentioned in that they are in direct support of expanded sales for dollars. The long-ranged objective of this whole market development effort, of course, is to end up with more American farm products being sold in the world market with payment in dollars. As long as we have surpluses, special government programs -- such as selling surpluses for foreign currency -- no doubt will be necessary. But as we use such programs, we also need to keep in view and support our primary goal of expanding the commercial market.

Even though government programs have come to occupy a prominent place in the export picture, there is more of a solid basis for commercial trade than is sometimes realized. It is encouraging that this past fiscal year, our agricultural exports sold for dollars were at the second highest level since World War II -- \$2.8 billion.

47

### Joint Projects

Now we come to the third grouping under foreign market development -- joint projects. This includes a wide variety of activity in which agricultural and trade groups are cooperating with the government. Although some of this work is rather spectacular, I think we should recognize that it could not build very extensively were it not for the more solid trade foundation laid by the other programs and activities previously reviewed.

The backbone of the joint project activity is Section 104(a) of Title I of Public Law 480. As a result of this authorization, when surpluses are sold to a foreign country for its own currency, we are able to use part of that currency for market development.

The usual pattern is for the Department to team up with a U.S. commodity or trade group, which also shoulders part of the cost. In some cases, a co-operating foreign trade group -- such as the Japanese-American Soybean Institute in Japan -- also makes a contribution.

To give some idea of the scope of this program, 145 market development projects have been set up in 28 countries, in cooperation with 36 trade groups. So far, about \$11 million has gone into the work. Every major group of farm commodities that the United States exports is included in this promotion.

As a quick glimpse, these are some representative activities:

European buyers of wheat have been brought to the United States to learn about varieties better adapted to their requirements.

Mobile kitchens are touring Japan, staffed with Japanese nutritionists, to show traditional rice-eaters how to prepare foods made from wheat.

People are being made more cotton-conscious in Europe and Japan. Promotions include National Cotton Weeks, election of Cotton Queen, cotton style shows, fashion design contests, and similar promotional devices.

We have taken steps to see what can be done to increase the use of American soybeans in the making of Japanese food products, such as tofu, miso, and soy sauce.

The U.S. tallow industry is using the program to encourage a wider range of use of tallow in importing countries, including the making of plastics and synthetic rubber and use in animal feeds.

During the past  $2\frac{1}{2}$  years, American farm products have been displayed at 20 international trade fairs in 12 countries. Frequently, samples of our products have been given out to make a more lasting impression. Literally millions of actual and potential foreign customers have become better acquainted with our farm products through these exhibitions.

When we sum it all up, we see that this foreign market development work, by and large, is not much different from the market development methods we are accustomed to here in our own country. The principal exceptions are that here in the United States we know each other's products well and we trade freely with one another, whereas in selling to foreign customers we must deal in markets where our products are less well known and where we face problems of trade controls and currency convertibility.

A fundamental principle in selling to foreign customers, just as in selling in the home market, is that certain standards have to be met -- quality, price, reliability, service. The fact that our grain standards were revised to better meet market needs is a market development action, expected to lead to better understanding on the part of foreign buyers. The fact that production of commercially undesirable varieties of wheat and tobacco now is being discouraged is a market development action, aimed at supplying foreign buyers with what they want.

89



In the broadest sense, whatever we do to move more of our farm products to foreign consumers is market development. There is a tremendous drive by the world's people to live better. The large export movements of our food and fiber is helping to fulfill this desire. As people's standards of living improve, they will make every effort to maintain those higher standards. They will not go back. This means that all these things we are doing to export more farm products today -- cash sales, donations, barter, sales for foreign currencies, trade agreements, promotions, or any other -- both contribute to man's universal drive to live better and help to firmup the prospect of the world buying more from us tomorrow.

# # # #

UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Marketing Service

✓ GENERAL ECONOMIC OUTLOOK FOR 1958 r

Talk by Nathan M. Koffsky  
Agricultural Economics Division  
at the 35th Annual Agricultural Outlook Conference  
Washington, D. C., November 18, 1957

After more than two years of a steady advance to new highs, economic activity in the nation has leveled off. Since early 1957, the nation's real output of goods and services has held fairly stable. Prospective changes in demands from consumers, from business and from government indicate that, on balance, the more or less sidewise movement of the economy can be expected to continue well into 1958. This appears to be the most probable development. Even so, the course of events could dictate otherwise. The cold war has spread into space with its impact on the economy not yet clear.

Economic growth over the past 12 months was relatively small and most of it occurred by the end of 1956. While the gross national product - a measure of the value of all goods and services produced - rose by some 22 billion dollars, or over 5 percent, between the third quarter of 1956 and the third quarter of 1957, most of the gain reflected increases in prices. Real output was up perhaps 1-1/2 to 2 percent contrasted with an increase of about 3 percent between the third quarter of 1955 and the same quarter of 1956. This latter is about the rate we have come to associate with normal economic growth.

Total employment has also held fairly steady this year. Nonagricultural employment remains higher than a year ago while farm employment continues its long-term decline. The average work week in manufacturing, however, is shorter than a year ago. So far this year, the civilian labor force has grown only some 400 thousand persons from last year in contrast with a gain of more than 1-1/2 million from 1955 to 1956. This reflects the fact that the uptrend in new entries of married women into the labor force has come to a halt this year. Unemployment is somewhat higher than last year but has been well below 3 million persons in recent months.

While most measures of real activity have leveled off this year, prices have continued to move up. The BLS index of wholesale prices in September was about 2 percent higher than a year earlier, with increases for farm products and foods as well as for industrial products. Again, as last year, there were more substantial price increases for metals, machinery and construction materials. In recent months, wholesale prices of industrial commodities have held steady while wholesale prices of farm products and foods have shown some declines. At retail, however, most prices have continued to move up persistently. The BLS index of consumer prices and the AMS index of prices paid by farmers have increased more than 3 percent over the past year. Retail food prices rose about 4 percent.

What have been the changes in demands which have shaped the economy over the past year? The following table compares the flow of expenditures from the 3 major sources of demand in the third quarter of 1957 with the same quarter a year earlier. Consumers increased their expenditures close to 15 billion dollars or 5 percent. Consumers accounted for almost two-thirds of the total increase in expenditures over the past year as compared with roughly half in the preceding year. Private investment in total rose only slightly, less than 2 percent. Government expenditures for goods and services increased almost 7 billion dollars, or 8 percent.

Table 1.- Gross National Product

	3rd quarter 1956 <u>Bil. Dol.</u>	3rd quarter 1957 <u>Bil. Dol.</u>	Change <u>Bil. Dol.</u>
Gross National Product	<u>416.7</u>	<u>439.0</u>	<u>+ 22.3</u>
Personal consumption expenditures	268.6	283.2	+ 14.6
Private investment	67.5	68.7	+ 1.2
Government purchases of goods and services	80.6	87.2	+ 6.6

(Seasonally adjusted annual rates)

Source:

U. S. Department of Commerce

In the consumer sector, it is noteworthy that expenditures for each of the major categories - durables, nondurables and services - increased about the same percentage. A year ago, expenditures for durables were down substantially largely reflecting a decline in automobile sales from about 7-1/2 million in 1955 to about 6 million in 1956. This year, sales are running slightly ahead of a year ago and prices are higher. Expenditures for nondurable goods, including the important food group, and for services continued to move up in response to higher consumer incomes, as they have in other recent years.



Table 2.- Personal Consumption Expenditures

	3rd quarter 1956 <u>Bil. Dol.</u>	3rd quarter 1957 <u>Bil. Dol.</u>	Change <u>Bil. Dol.</u>
Personal consumption expenditures	<u>268.6</u>	<u>283.2</u>	<u>+ 14.6</u>
Durable goods	33.0	34.7	+ 1.7
Nondurable goods	134.4	142.5	+ 8.1
Services	101.1	106.0	+ 4.9
Consumer disposable income	288.8	303.0	+ 14.2
Savings	20.3	19.8	- 0.5
Personal savings rate	7.0%	6.5%	- 0.5%

(Seasonally adjusted annual rates)

Source:

U. S. Department of Commerce

It should also be noted that consumer expenditures have risen slightly more over the past year than consumer incomes after taxes. Thus, the rate of savings out of current income has declined from about 7 percent in the third quarter of 1956 to 6-1/2 percent in the most recent quarter. Consumer credit outstanding has increased some 3 billion dollars over the past year and now represents a little over 14 percent of consumer income after taxes, a slightly higher percentage than a year earlier. Instalment credit extended, particularly for automobiles, continues to exceed repayments.

Finally in the consumer sector, we should note that incomes have continued to rise most of this year despite the leveling in employment. Increasing wage rates have augmented the flow of income though at a slower rate than in 1956. Further, this year there has been some increase in social security payments reflecting wider participation. Despite the rise in prices over the past year and a substantial increase in population, the per capita purchasing power of income available for spending has changed little in over a year.

Table 3.- Private Investment Expenditures

	3rd quarter 1956 <u>Bil. Dol.</u>	3rd quarter 1957 <u>Bil. Dol.</u>	Change <u>Bil. Dol.</u>
Private investment	<u>67.5</u>	<u>68.7</u>	<u>+ 1.2</u>
Residential construction	15.1	14.0	- 1.1
Non-residential construction	18.1	19.0	+ 0.9
Producers' durable equipment	29.0	30.5	+ 1.5
Change in business inventories	3.3	2.0	- 1.3
Net foreign investment	2.0	3.2	+ 1.2

(Seasonally adjusted annual rates)

Source:

U. S. Department of Commerce

In the investment sector, outlays for new residential construction in the third quarter of this year were 7 percent less than a year earlier. New nonfarm housing starts this year are totaling less than 1 million units compared with 1.1 million in 1956 and 1.3 million in 1955. However, the average cost is higher, partly reflecting bigger homes. Mortgage credit is still tight and interest rates are higher than a year ago. Mortgage debt outstanding increased less in the first half of this year than in the first half of 1956. It appears, however, that the decline in housing, which has been substantial over the past 2 years, has been arrested. Housing starts have leveled off in recent months and the rate of expenditure in the third quarter was about the same as in the second quarter.

Investment expenditures for non-residential construction and producers' durable equipment are up from a year earlier. Nonfarm business investment outlays for new facilities and equipment recorded another substantial increase over the past year, some 7 percent. However, construction and machinery costs are up almost as much, indicating a relatively small increase in volume. Over the past 3 years, business outlays for new plant and equipment have risen almost 40 percent. While prices in this sector are also substantially higher, there has been a sizeable increase in industrial capacity during that period. Outlays for farm construction and for farm machinery are apparently showing some improvement this year over last.

Very significantly, the strong uptrend in business outlays for plant and equipment, which has been a strong expansionary force in the economy for several years, has also leveled off in recent months. The most recent report of the Securities and Exchange Commission and the Department of Commerce indicates that

business intended to invest in new plant and equipment at about the same rate in the third and fourth quarters of this year as in the second quarter. Corporations finance a major part of capital investment from internal sources, depreciation reserves and undistributed profits. So far this year also, they have obtained more funds from new security issues than in the same period of 1956. However, the rise in commercial loans from banks has been much less than a year ago.

The effect of changes in business inventories on economic activity was much the same in the third quarter of 1957 as a year earlier. A year ago, business was accumulating inventories at an annual rate of about 3 billion dollars. In the latest quarter, business was still accumulating inventories but at a slightly lower rate. Over the past year, increases in sales have about matched the rise in inventories and stock-sales ratios are much the same. They are slightly lower at the retail level but somewhat higher in manufacturing, notably for durable goods.

The contribution to economic activity here of our trade balance with foreign countries was somewhat greater in the most recent quarter than a year earlier. But the trend in our net foreign trade balance has been downward for some months. The blockage of Suez stimulated our exports, especially to Western Europe earlier this year. With trade routes reestablished, this is no longer a factor. However, our commercial exports in the last quarter ran some 10 percent above a year earlier while our imports were much the same as a year ago.

Table 4.- Government Purchases of Goods  
and Services

	3rd quarter 1956 Bil. Dol.	3rd quarter 1957 Bil. Dol.	Change Bil. Dol.
Government purchases of goods and services	<u>80.6</u>	<u>87.2</u>	<u>+ 6.6</u>
Federal	47.3	50.8	+ 3.5
National Security	(42.7)	(46.0)	(+ 3.3)
State and local	33.3	36.4	+ 3.1

(Seasonally adjusted annual rates)

Source:

U. S. Department of Commerce

Turning now to the final segment - government - the rate of federal purchases of goods and services increased over 3 billion dollars between the third quarter of 1956 and the third quarter of 1957. This was largely in expenditures for the national security, which now account for about 10.5 percent of national output compared with 10.2 percent a year earlier. There was a slight decline in the



rate of such outlays between the second and the third quarters. In the fiscal year 1956-57, the federal budget showed a surplus of 1.6 billion dollars, the same as in the previous year. On a cash basis, including receipts and payments of trust funds, the surplus was reduced to 2.1 billion dollars compared with 4.5 billions in fiscal 1955-56, largely reflecting heavier payments under the Social Security program. State and local government expenditures continued to expand at the rate of some 3 billions over the year, much the same as in other recent years. The highway program is enlarging and there appears to be no let-up in outlays for schools and other public facilities.

With these trends as background, showing the diverse forces presently operating in the economy, let us appraise how the prospective demands and expenditure flows from these three major sectors--consumers, business and government--may affect the economy.

Starting with the government sector, there appears to be little doubt that the uptrend in State and local government outlays which has persisted through the post-war period will continue in 1958 much as in 1957. The highway program will be a more important factor next year than this year, and will likely grow more important in the years beyond 1958. The needs for public facilities increase as our population grows not only in size but in mobility. We need particularly to prepare for an accelerated onrush on our school systems a few years hence.

So far as Federal Government outlays are concerned, the Budget Review of October suggests some reduction from the current rate of defense outlays in the first half of 1958. Beyond mid-1958, we do not know. However, the reduction in defense outlays during the first half of 1958 that may be realized, is not likely to exceed the rise in State and local government expenditures and might well be less. Thus, the total flow of expenditures from government should at least hold steady through mid-1958.

On the other hand, the total flow of expenditures from the investment sector might well diminish in 1958. Residential construction is expected to show some improvement from the current relatively low level. The decline has been arrested. FHA terms have recently been liberalized. And mortgage credit may be more readily available, especially if the demands for funds by business for capital investment should ease.

This easing in capital investment for new plant and equipment appears to be a fairly strong probability in 1958. Industrial capacity has been enlarged in recent years. In some manufacturing industries, such as steel and paper, the current rate of operations is substantially below capacity. Tight credit, a less favorable cash position for many corporations, and some decline in the stock market which might tend to dampen flotations of new securities, could also affect investment plans. Investment by utilities, however, may well continue to increase. Declines in new orders for machinery, the National Industrial Conference Board quarterly survey of capital appropriations and the recently released McGraw-Hill survey on business intentions to invest in new plant and equipment in 1958 reinforce the likelihood of some reduction in investment outlays next year. The decline need not be substantial, considering the large funds for investment provided by depreciation and amortization allowances. Perhaps half of the

current rate of business investment involves modernization of facilities rather than additions to capacity. Also, the rapid expansion in research outlays generates investments required to produce new products.

Business inventories overall should continue relatively stable. At present, business is adding some to the level of inventories. This might well come to a halt within the next year. But no radical change in the inventory position seems likely.

Net foreign investment may also be a small minus factor for 1958. Although economic activity abroad continues high, some foreign countries may reduce their imports from us in order to maintain or replenish their financial reserves. Our imports may be maintained close to this year's level but our net export balance may be somewhat smaller.

Thus, we face the probability that the sum of the flows of expenditures by business and by government may gradually work lower as 1958 progresses. It seems likely that the major impact of any reduction in defense outlays will occur in the first half of 1958 while that of investment in new plant and equipment may well come later. The completion of projects presently underway would provide a considerable cushion to investment outlays for some months ahead.

Under such circumstances of a gradual reduction in combined expenditures by business and government, the consumer could well take up the slack. Consumer spending has been strong and in the most recent quarter the annual rate of such expenditures increased by more than 4 billion dollars, over 1 billion dollars more than the increase in the rate of consumer income. Although the rate of saving out of current income is lower than a year ago, it is still substantially higher than it was in 1955. The saving rate may well work lower over the year ahead. Further, increases in wage rates, some of which stem out of previous agreements, will likely maintain the flow of consumer income despite the possibility that some reductions in employment might occur, especially if productivity increases rapidly over the next year in contrast to apparently little significant change in the past two years. As the big automobile year of 1955 recedes, there is some reason to be more optimistic concerning purchases of autos this coming year. Further, any improvement in new housing would likely be reflected in a somewhat stronger consumer demand for household appliances.

To sum up, we see no real reason why consumer income and consumer demand for food during most of the year ahead should be essentially different than at present. Although there may be some decline in combined government and investment outlays, almost certainly we do not face the size of the reduction which occurred in the mild recession of 1953-54. Between the third quarter of 1953 and the third quarter of 1954, investment expenditures declined some 4 billion dollars while government outlays for goods and services dropped 8 billions. In that period federal expenditures declined 11 billions, again largely outlays for the national security while State and local government expenditures rose 3 billions. These reductions total much more than we can reasonably anticipate for the period ahead, and the economy is larger now than in 1953 and could absorb them better. Even so, the flow of personal incomes in the 1953-54 period was well maintained by rising wage rates and increased unemployment compensation payments. Consumer

33

expenditures, enlarged by a cut in income taxes of some 3 billion dollars, rose 6 billion dollars between the third quarter of 1953 and the third quarter of 1954. We would do well to remember that the sustained rise in consumer expenditures in 1954 provided the initiating force to the resumption of the post-war boom later in that year.



## HOME FURNISHINGS SITUATION

By

Starley M. Hunter  
Family Economics and Home Management Specialist  
Federal Extension Service  
U. S. Department of Agriculture  
Before The  
Agricultural Outlook Conference  
Washington, D. C. November 20, 1957

It was not possible to find a speaker for Outlook on home furnishings in a Government agency nor were we successful in obtaining a speaker on the subject from a trade organization. In the case of home furnishings, the various segments of the trade are highly specialized and consist of a large number of comparatively small producers and distributors; consequently, it is difficult to find a person who is able to present Outlook for the industry as a whole. Most of what you will hear today has been obtained from the Home Furnishings Daily (Fairchild Publications, New York City) and from interviews with home furnishings merchandisers.

As many of you know, new home furnishings merchandise is presented in spring and fall markets. At the time I was looking for Outlook information the October market in New York was underway and buyers were reviewing merchandise available for spring delivery. Also, in October, fall markets were underway in Chicago and Grand Rapids on the same dates to accommodate buyers. These markets are not open to the public and little if any information is available concerning new merchandise until it is presented in the market. Stress was being placed in the 1957 fall markets on the up-grading of the choice of consumers.

In the past 5 years a 16.9 percent gain has been made in total sales by all types of retail stores. Home furnishings registered a gain of 19.5 percent. (Table 1.) Levels of prices of home furnishings averaged 5 percent lower in 1956 than in 1952. We have both a growing dollar sales and a greater unit volume of sales. Specialty stores such as: floor coverings, china and glassware, and curtains and draperies registered 76 percent jump in dollar volume in 1956 over 1952. In 1956 home furnishings spending accounted for 7.3 percent of the total consumer expenditure for all goods and services as compared with 7.5 percent in 1952. (Table 2.) In October the 1957 home furnishings portion of total retail sales had held even with figures in the same 1956 period. Thus, spending for home furnishings has not kept pace with rising consumer incomes. During the early 1930's lack of confidence in the price structure was more of a restraint than lower prices were a stimulant to sales. There is some indication that the hope for lower prices is now affecting the placing of orders for home furnishings by retail dealers. A stabilizing of the price structure may bring a change since buying is most stable when prices are most stable.

222

Table I

RETAIL STORE SALES, 1952-1956

Store Type	Sales		% Chge. 1956/ 1952	% of Total Retail Sales	
	1952	(Billions) 1956		1952	1956
All Retail Stores.....	\$162.4	\$189.7	/16.9	100.0	100.0
Home Furnishings Group.....	8.9	10.7	/19.5	5.5	5.6
Furniture Stores.....	4.3	4.9	/13.5	2.6	2.6
Appliance-Radio-TV Stores..	3.7	4.1	/11.6	2.3	2.1
Other Hfgs. Spec. Stores..	1.0	1.7	/76.0	0.6	0.9
Lumber-Building-Hardware...	10.2	11.2	/9.8	6.3	5.9
Lumber, Bldg. Materials...	7.6	8.3	/9.7	4.7	4.4
Hardware Stores.....	2.6	2.9	/10.1	1.6	1.5
Gasoline Stations.....	10.0	13.7	/37.7	6.1	7.2
Car, Tire, Accessory Dlrs...	28.3	36.1	/27.5	17.5	19.0
General Merchandise Stores..	18.7	20.8	/11.1	11.5	10.9
Department Stores.....	10.3	11.3	/10.2	6.3	6.0
Mail Order (Catalog).....	1.3	1.4	/5.1	0.8	0.7
Variety Stores.....	3.0	3.4	/14.2	1.9	1.8
Other Gen. Mdse. Stores...	4.1	4.6	/12.8	2.5	2.4
Apparel Stores.....	10.6	11.6	/9.2	6.5	6.1
Food Stores.....	38.0	44.2	/16.3	23.4	23.3
Eating & Drinking Places....	12.7	14.3	/12.8	7.8	7.6
Drug Stores.....	4.7	5.8	/22.4	2.9	3.0
Liquor Stores.....	3.2	3.9	/24.6	1.9	2.1
Other Retail Stores.....	17.0	17.4	/2.3	10.6	9.2

Source: U. S. Department of Commerce.

Table II

CONSUMER EXPENDITURES & CHANGES IN PRICE LEVELS  
IN MAJOR CATEGORIES, 1952-1956

	1952		1956		% Change 1956/1952 in--	
	Expenditures Bil. \$	%	Expenditures Bil. \$	%	Expendi- tures	Price Levels
Total	\$218.3	100.0	\$267.2	100.0	/22.4%	/ 4.2%
Food	70.1	32.1	80.7	30.2	/15.1	- 2.5
Alcoholic Beverages	8.7	4.0	9.4	3.5	/ 7.2	/ 4.1
Tobacco	5.1	2.3	5.7	2.1	/11.6	/ 8.7
Clothing & Access.	20.1	9.2	21.8	8.2	/ 8.3	- 0.1
Home Furnishings	16.4	7.5	19.4	7.3	/18.0	- 5.1
Housing & Household Operation	42.2	19.3	54.3	20.3	/28.7	// 6.2
Medical Care, etc.	10.5	4.8	13.4	5.0	/27.7	/13.1
Personal Care	2.6	1.2	3.6	1.3	/39.2	/ 7.3
Transportation	23.2	10.7	30.3	11.3	/30.5	/ 2.0
Recreation*	9.3	4.3	11.4	4.3	/22.9	/ 1.0
Other (personal business, travel, education, etc.)	10.1	4.6	17.3	6.5	/70.9	

\* Expenditures for radios, television sets, phonographs, classified by the Department of Commerce as expenditures for Recreation, have been included with home furnishings in the above table.

Source: U. S. Department of Commerce, Department of Labor



Production of furniture and floor coverings stood at 117 (1947 - 49= 100) at the end of August of both 1956 and 1957. (Survey of Current Business October 1957, U. S. Department of Commerce.)

Credit outstanding at furniture stores fell 5 million dollars during September 1957 to a total of 921 million at the end of the month. The total was down 49 million from a year earlier.

Some change is taking place in the marketing of home furnishings. More furniture retailers over the Nation are joining buying and merchandising co-operatives, which range from 6 to 600 outlets. Stores are provided catalogs, promotions, and sometimes private labels.

Here are some statements found in the Home Furnishings Daily by areas which may be indicative of Outlook for home furnishings to some extent:

Philadelphia: Credit rejects by area banks on T.V. receivers was common because many of the consumers who requested credit were in the low-income bracket and "in hoc up to their ears with new car payments, mortgages, and what not". The fall season in unit sales was very soft. Middle and high income bracket buyers were noticeably lacking.

New York City: Most aluminum furniture producers will have to play a guessing game this year in planning their production schedules for goods to be delivered next spring. Both business written and commitments for future orders during the recent summer furniture shows in New York and Chicago were not sufficient to give producers an accurate idea of what their production schedules should be. If the season is early and long it may bring shortages in this type of furniture. Some writers think the orders are slow this year in the hope of price concessions later on.

Los Angeles: One furniture manufacturer said that he had had more trouble with fabrics in the past 2 years than he had had in his 30 years of experience. Generally the manufacturers were asking the fabric producers for better wearing and more fade-resistant fabrics. A plea was also made for a higher degree of honesty in labels, with the hope that this would prevent regulation in the future.

Denver: Merchandisers in 11 Western States had the attitude that they were in a short recession in sales that bothered no one. They expect sales to mount upward in the long run.

Boston: Carpet wool is in plentiful supply. Sales are slow. Mills seem to have a supply on hand and are waiting for possibly lower prices before placing orders.

Baltimore: A new sheet material with adhesive property on both sides which will grip floor and tile is being marketed in a limited area. This material will eliminate the use of cements and mastics. Consumer reaction of purchasers is to be tested.

Miami: No great style changes or radical engineering improvements can be expected in the aluminum outdoor furniture lines from local producers for 1958. Slight restyling and moderated changes in line will take place. Widths, lengths, and heights will be the same as 1957. Buyer preference in color is expected to run toward green, white, and turquoise.

England: Electrically heated underfelt to provide room warmth is being introduced to British homes this fall. Temperatures of 70 to 75 degrees Fahrenheit at floor level is produced which will maintain room temperature at 57 to 63 degrees Fahrenheit. Plans are reportedly being considered to license production manufacture in the United States.

Efforts are being made in home furnishings to bring it into line with other commodities from the standpoint of obsolescence.

227





UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Marketing Service  
Agricultural Estimates Division

LEGUME AND GRASS SEED OUTLOOK

The year 1957 was a good "grass seed year". Growing and harvesting weather was the most favorable in many years. Production of 12 kinds of grass seeds used mostly for pasture, turf, hay and soil conservation was three-fifths larger than a year ago and one-third above average. Many of these grass seeds were in short-supply last spring. It was also one of those unusual years when native grasses were well set with seed. Although not all the native grass seed was harvested, the unharvested portion will reseed pastures and ranges in the South Central and Plains States where droughts in 1955 and 1956 thinned stands. Production of legume seeds including alfalfa, clovers and lespedeza, is 4 percent smaller than a year ago, but adequate to maintain supplies above normal domestic needs. Production of winter cover crop seeds is 12 percent below last year largely as a result of voluntary cutbacks aimed at reducing burdensome surpluses of common and perennial ryegrass, and disappointing outturns of hairy vetch and purple vetch. The declines in these kinds more than offset increased production of Austrian Winter peas, lupine and common vetch.

Supplies of Seed Compared with Last Year and Average

National Supply

Current total supply (1957 production plus carry-over on June 30, 1957, plus imports July 1 through September 30, 1957) of 27 legume and grass seeds is estimated at 1,180 million pounds — down 2 percent from last year. If imports, which are likely to come from Canada, New Zealand, Australia, Denmark and other European countries, are about normal, our national supply could exceed slightly last year's total of 1,205 million pounds, as imports usually add about 4 percent to the domestic supply. Even if allowance is made for these additional imports, the total supply for the coming year will be about one-eighth smaller than the 5-year average.

The breakdown by groups is as follows:

Total supply of alfalfa, lespedeza and clover seed (excluding crimson), estimated at 571 million pounds, is 8 percent smaller than the available supply of 619 million pounds last year, and 3 percent smaller than the 5-year average. Reductions from last year are most marked for alfalfa, red clover, sweetclover and Ladino clover. Imports from Canada will augment our supplies of these kinds and could place the total for this group above average. Supplies are greatly in excess of 1956-57 domestic disappearance for alfalfa, red clover, alsike clover and sweetclover, and in ample to surplus positions in relation to domestic disappearance for Ladino and white clover.

Total supply of 12 grasses, estimated at 309 million pounds, is 15 percent larger than the supply of 268 million pounds a year ago and 13 percent larger than the 5-year average. Record large supplies are available for Sudangrass and bentgrass;

Prepared as background material for the Seed Commodity Session of the 35th Annual National Agricultural Outlook Conference, Washington, D. C., November 18 - 22, 1957, by T. J. Kuzelka, Agricultural Estimates Division, Agricultural Marketing Service, United States Department of Agriculture.

other kinds in relatively large supply are orchardgrass, smooth brome-grass, crested wheatgrass, Chewings fescue, and Merion Kentucky bluegrass. Considering declining usage, timothy and redtop might be added to this latter group. Total supply is greatly in excess of 1956-57 domestic disappearance for smooth brome-grass, Sudangrass, timothy, orchardgrass and bentgrass and moderately in excess for crested wheatgrass and redtop. Supplies of red fescue are below domestic requirements and will need to be supplemented by imports.

Total supply of 8 winter cover crops, estimated at 300 million pounds, is 6 percent below last year and 40 percent below the 5-year average. Reductions in this group are largest for vetch and common ryegrass. Even though supplies appear to be small by these comparisons they are comfortably above domestic disappearance levels, because of declining usage of cover crops in the South. In that area winter oats and other lower priced winter turf crops, suitable for pasture, compete with winter legumes and grasses.

#### Acreage that Could be Seeded in 1957-58

Assuming average rate of seeding in solid stands, a total of 85 million acres could be seeded in the fall of 1957 and the spring of 1958 with total visible current supplies. If allowance is made for normal imports, an additional 2 million acres could be seeded. This total compares with 87 million acres that could have been seeded with last year's supplies and with 94 million acres, the 5-year average. However, domestic disappearance was about one-fourth smaller than total supplies in 1956-57 and actual seedings were made on only 61 million acres. This is 26 million acres less than the 87 million acres that could have been seeded with total supplies. About 9 million additional acres, or a total of 70 million for the Nation could be seeded in 1958 without reducing carry-over below normal levels. Statistics indicate that the upward trend in total usage of seed is leveling off but that total supplies continue to increase. The spread between domestic disappearance of all seed and total supplies was more than doubled in 1950, 1951 and 1952 by excessively large crops. Although this spread has narrowed greatly in the past 4 years, it remains wide because of large exports and carry-over. Acreage losses from winter hazards and other causes have been rather small during the past ten years and a large part of the total usage has been devoted to replacement and substitution of one kind for another. These substitutions are likely to continue into 1958. Price differentials will accentuate the increased usage of alfalfa and much of the increase will continue to be at the expense of red clover. Up to the year 1951, domestic disappearance of alfalfa was close to that of red clover and substitutions were made freely one for the other. However, since that year alfalfa usage increased by almost one-half and red clover usage dropped about one-third. Plentiful supplies of smooth brome-grass will blend well with the up-trend in alfalfa. Usage of ryegrass is expected to continue at a high level and both common and perennial ryegrass will continue to displace the higher priced redtop, timothy, bentgrass and fescues in turf mixtures. The seeding of acreage signed under the Soil Bank and soil conservation is expected to strengthen the demand for many kinds and especially for crested wheatgrass and smooth brome-grass, both of which were in short supply last spring.

#### Most Seed Prices Lower than Last Year

Prices received by growers for all legumes and grasses, priced so far this year, are lower than last. (See accompanying table). As a result of large crops harvested in 1957, and large carry-over inventories, prices of some are the lowest in many years. This includes smooth brome-grass, crested wheatgrass, redtop,



Sudangrass and orchardgrass. In mid-October the most marked declines from last year's season averages occurred in the foregoing kinds and for white clover, alsike clover and lespedeza.

Prices paid by farmers for legume, grass and winter cover crop seeds were substantially lower this fall than either last spring or a year earlier. In mid-September, 1957, prices were lower than a year earlier for 20 of the 26 kinds and types of fall-sown seeds. Sharpest declines occurred for sweet lupine, smooth brome grass, crested wheatgrass, Ladino clover and common crimson clover -- all one-fourth or more lower. Other seeds for which prices were down more than 20 percent were timothy, common vetch, white clover, redtop, and re-seeding type crimson clover. Those down 10 to 20 percent include the ryegrasses, orchardgrass, hairy vetch, blue lupine, tall fescue, and Kentucky bluegrass. Red and alsike clover seed and Austrian Winter peas were slightly lower. By contrast, somewhat higher prices than a year ago were noted for common alfalfa, Wild Winter peas, winter oats, rye and barley. With the sharply lower prices being received by farmers for 1957 seed crops it is very likely that retail prices of most seeds purchased by farmers for seeding in the spring of 1958 will be lower than in 1957. The downward change in prices will be sharp for some kinds and will be an added inducement to substitute with the cheaper kinds and to use increased quantities of them.

#### Current Supply for Individual Kinds Compared with Domestic Disappearance

Alfalfa: The total supply of alfalfa seed (1957 production plus carry-over on June 30, 1957 plus imports July 1 - September 30, 1957) for planting during the 1957-58 season is indicated at 212 million pounds, as shown in the accompanying table giving supply and disappearance of 27 legume and grass seeds. This supply is 11 percent below a year ago, but is close to the 5-year average of 216 million pounds. The supply is, however, more than adequate for normal requirements, as it is 50 million pounds above the indicated 1956-57 domestic disappearance. Carry-over stocks of this seed have been excessively high during the past 5 years -- more than 3-fold the average of the 5 years prior to 1953. Increased usage will help reduce the burdensome surplus. Supplies of many certified alfalfa varieties will again be plentiful with the exception of the newer introductions. The wide price differentials which existed up to the spring of 1957 between certified and non-certified varieties have narrowed and retail prices in 1958 of many certified varieties should be relatively close to common varieties. This is expected to increase the usage of certified seed.

Imports of alfalfa seed during the year ended June 30, 1957 totaling only 81,300 pounds were the smallest since 1936 and compare with the 10-year average of 8,500,100 pounds. Exports during the year ending June 30, were the largest of record. They totaled 17,059,000 pounds and exceeded last year's previous high of 14,065,000 pounds by one-fifth and were five times the average exports.

Red Clover: The total supply of this seed of 95 million pounds is 6 percent below last year and the smallest in three years. It exceeds the 1956-57 domestic disappearance by 26 million pounds. This indicates that unless there is a reversal in the down-trend in the usage of red clover, supplies for seeding in the fall of 1957 and the spring of 1958 are more than adequate for domestic requirements. The foregoing figures do not include production of red clover seed in California which may add about 1 to 2 percent to the national totals. Practically all of the production in that State is certified seed.

Prices received by farmers for red clover seed on October 15 this year were about one-fourth lower than a year earlier. This sharp reduction will undoubtedly result in lower retail prices in the spring of 1958. 7



Alsike Clover: Although the indicated total supply of alsike clover seed, including imports through September 30, 1957, of 16.9 million pounds is about equal to last year, imports during the rest of the fiscal year could easily boost supplies 1 to 3 million pounds. Because of low prices, movement of this seed from farms in the important alsike producing States -- Idaho, Oregon and California -- has been the slowest of record. Only 21 percent of the total crop was sold to October 15 this year. Should the movement continue at this slow rate, imports are likely to exceed last year's 5-year low of only 252,000 pounds. Even without additional imports the current supply is more than adequate for normal domestic requirements.

Prices received by growers on October 15 for 1957 crop alsike were \$16.80 per 100 pounds, down sharply from last year's mid-October price of \$32.40. The low current price level will no doubt be reflected in retail prices next spring, and result in increased usage of this seed.

Sweetclover: Domestic disappearance of sweetclover seed has declined steadily from a level of 77 million pounds down to 49 million pounds during the past 7 years. Unless there is a reversal of this trend, the indicated current total supply of 57.8 million pounds will be close to 9 million pounds above domestic needs next year.

Imports from Canada have averaged 12 million pounds during the past 5 years and have contributed about 16 percent to the total supplies. Canada's carry-over stocks on June 30, 1957 totaling 5.9 million pounds were nearly three-fold the 10-year average, and little change is expected in production of sweetclover seed in 1957 from that produced in 1956. Thus, although our total supply is in excess of normal domestic requirements, should additional quantities be needed they could be imported from Canada.

Prices received by growers for 1957 crop sweetclover seed, were \$7.20 per 100 pounds on October 15, sharply lower than the \$10.00 received a year earlier, and the lowest since 1942. Sweetclover will undoubtedly be one of the lowest priced legumes available for seeding in the spring of 1958, and may receive more attention from price-conscious users.

White Clover: The total supply of 7.6 million pounds of white clover seed exceeds last year's total by 17 percent and is the largest in 5 years. Compared with domestic usage in recent years, the supply of this seed is in a surplus position. Carry-over of old seed on June 30, 1957 was the largest of record and imports during the year ending on the above date were only about one-tenth the previous year.

Prices to growers on October 15, 1957 were \$35.60 per 100 pounds, far below last year's price of \$68.10 and the average of \$54.96. Sales by growers to mid-October were the slowest in 7 years.

Ladino Clover: Although the current supply of Ladino clover seed, indicated at 12.3 million pounds, is down 25 percent from last year it is more than double the average domestic disappearance. After reaching a peak level of about 7 million pounds during the years 1950 to 1954, domestic usage declined to 4.7 million pounds in 1955-56 and 5.6 million pounds in 1956-57. Ladino has been in surplus position since 1952 when the National carry-over reached 12.5 million pounds. Advancing to a record high of 18.3 million pounds in 1953 the carry-over has declined steadily in subsequent years down to 8.3 million in 1957. These stocks are large in relation to other kinds of competing legume seeds.

Lespedeza: The supply of lespedeza seed for 1958 planting is indicated at 169 million pounds, about equal to last year but 39 million pounds larger than the 5-year average. If domestic requirements approximate the average of the last two years, current supplies will be in good balance with the demand for this seed next spring. Prices received by growers on October 15, 1957 were the lowest since 1941, and retail prices next year will likely be lower than in 1957. The lower prices should encourage increased use of this seed.

Timothy: The 1957-58 supply of 44 million pounds of timothy seed is 2 percent smaller than a year earlier, and the smallest since 1950. However, this supply is more than adequate for normal domestic requirements as the disappearance of this seed has declined steadily during the past 4 years and by 1956 was the lowest of record. Should additional quantities be needed as a result of unusual demand next spring, some seed could undoubtedly be imported from Canada. That country had a relatively large carry-over on June 30, 1957 and even with the indicated smaller crop some seed will likely be offered for export to the U. S. Exports from Canada during the past 4 years have been upwards of 2.5 million pounds.

Prices received by growers for 1957 crop timothy are down about half from a year ago. On October 15 the U. S. price of \$8.22 per 100 pounds compared with \$16.30 a year ago. Undoubtedly these lower prices will be reflected also in lower retail prices next spring and timothy seed is likely to become more attractive to users in the eastern half of the U. S.

Orchardgrass: As a result of record large production in 1957 and a substantial carry-over of orchardgrass seed from previous years' crops, supplies available for seeding in the fall of 1957 and the spring of 1958 are large. Estimated at 21.4 million pounds, current supplies are 11 percent and 4 percent, respectively, larger than a year ago and the 5-year average. Compared with domestic disappearance supplies are more than ample to meet domestic demand, especially in view of expected competition from smooth brome grass. Accentuating this surplus position is the exportable surplus seed available in Denmark. Imports added 6 percent to our supplies last year, but unless there is an abnormal demand for this seed next year, imports will not be needed this year.

Eighty percent of the commercial crop of orchardgrass seed was sold by growers in Virginia, Kentucky and Missouri by October 15, which assures that plentiful supplies of domestic seed will be available. The U. S. price of \$10.90 per 100 pounds received by growers on October 15 is less than half last year's price of \$24.30.

Redtop: Total supply of redtop seed is indicated at 6.2 million pounds, up 5 percent from a year ago, but 15 percent lower than average. If domestic disappearance in 1957-58 continues at the low level of the past 4 years, the current supply is adequate for normal domestic demand.

Prices received by growers for the 1957 crop were the lowest since 1947. Exports of redtop seed during the year ending June 30, 1957, totaling 624,000 pounds, were smaller than the 773,000 pounds exported a year earlier, but exceeded the previous two years.

Kentucky Bluegrass: Supply for 1957-58 seedings is indicated at 24 million pounds, one-seventh more than last year, but close to the 5-year average of 23.6 million pounds. Most of the currently available seed is from the relatively large good quality 1957 crop. Supplies are adequately large enough that home owners may expect to find a higher concentration than last year of Kentucky bluegrass in turf and lawngrass mixtures. Retail prices on September 15, 1957 were about one-fourth

99



lower than a year ago and will likely continue at lower levels into next spring. Competition from lower priced bentgrass and fescue seed will be strong in 1958.

Merion Kentucky Bluegrass: Production of this improved grass is ahead of demand for the first time. Supplies, at 2.7 million pounds, are ample to surplus for the coming year. Prices are expected to continue high, but are not likely to slow or change the upward trend in usage.

Fescue: Current supply of tall fescue at 32.9 million pounds, is nearly one-fourth below last year and the smallest in 6 years. It is barely adequate for the declining domestic requirements. Supplies of both red and Chewings fescue are also below last year. In recent years nearly half of our requirements of red fescue were imported from Canada. Large quantities will need to be imported in the coming months to bring supply in balance with domestic requirements. Supplies of Chewings fescue at 9.4 million pounds, appear to be adequate for 1957-58 seedings.

Bentgrass: Supplies of bentgrass, indicated at 9.6 million pounds surpass last year's previous high of 7.7 million pounds by 25 percent. Although domestic usage is now more than double that of 5 years ago, there is a surplus of bentgrasses, mostly of the lower-priced kinds. Carry-over has been building up for 5 years and on June 30, 1957 it was the largest of record.

Smooth Bromegrass: Supplies of this seed are plentiful as a result of the record large 1957 crop, and retail prices of this seed next spring should be the lowest of all grasses except ryegrass and Sudangrass. Indicated at 29.1 million pounds, the current supply is almost double the 15.3 million pounds a year ago. While this supply is far in excess of last year's low domestic requirements, it is expected that if soil moisture is adequate next spring, increased usage is expected to absorb much of this seed.

Crested Wheatgrass: Supplies of this seed, at 9 million pounds, are the largest in 12 years. This is more than 5 million pounds above last year's domestic disappearance. Although disappearance has been relatively low for the past 5 years, it is expected to increase sharply in 1958 because of anticipated lower retail prices, improved moisture conditions in the Plains and Western States, and Soil Bank and conservation needs.

Sudangrass: The 1957 production of Sudangrass seed was the largest of record. This, plus an above-average carry-over place the supplies at an all-time high of 114.6 million pounds. Because of the limited areas of use, competition from sorghums, and dependence on unfavorable moisture conditions for other crops for increased usage, Sudangrass seed is in surplus supply for 1958 plantings. Prices received by growers for this year's seed were very low. In mid-October they were \$.258 for common and \$.396 per 100 pounds for improved varieties. The weighted U. S. price of \$.329 compares with \$.610 a year ago and the average of \$.681. The lower prices to growers will undoubtedly be reflected in retail prices next spring.

Winter Cover Crops: Demand for winter cover crop seeds is over for this fall, and only limited seedings are usually made in spring. Supplies available this fall were in excess of domestic requirements for common ryegrass, perennial ryegrass and Austrian Winter peas, but those of vetches, lupine and crimson clover were in barely adequate positions. Larger quantities than usual of both common and perennial ryegrass were used in turf and lawn grass mixtures in recent years of high production. These grasses replaced other higher priced kinds and will continue to be used widely in cheaper mixtures next spring.



LEGUME AND GRASS SEEDS, AVERAGE 1951-1955, ANNUAL 1956 AND 1957

Kind of Seed	PRODUCTION			CARRY-OVER			IMPORTS			TOTAL SUPPLY			DOMESTIC			EXCESS OF 1957-58		
	Average:			Average:			Average:			Average:			Average:			Average:		
	1951-55:	1956	1957	1951-55:	1956	1957	1951-55:	1956	1957	1951-55:	1956	1957	1951-55:	1956	1957	1951-55:	1956	1957
Alfalfa	162,298	163,952	153,133	49,844	59,310	59,310	81	81	81	216,496	239,137	212,450	150,060	163,768	163,768	62,390	49,682	62,390
Red Clover	81,946	74,759	66,468	35,087	28,873	28,873	4,560	4,560	4,560	121,613	101,392	95,341	87,994	87,994	87,994	2/ 69,519	7,342	25,822
Alsike Clover	11,607	10,507	10,859	5,004	6,155	6,009	0	0	0	19,888	16,914	16,868	12,992	10,168	10,168	3,876	6,700	6,700
Sweetclover	44,083	35,335	35,455	19,460	22,918	19,723	12,508	10,456	2,634	76,071	68,709	57,812	58,730	48,886	48,886	3/ 918	8,926	8,926
White Clover	7,308	4,516	5,390	1,245	1,861	2,220	1,483	1,333	34	7,036	6,510	7,444	5,604	3,590	3,590	2,040	4,054	4,054
Ladino Clover	122,174	144,595	148,850	12,523	10,482	8,303	62	0	0	20,560	16,432	12,278	5,560	5,629	5,629	6,718	6,649	6,649
Lespedeza	424,351	439,514	424,129	131,231	167,751	144,634	25,064	0	0	130,222	169,457	169,046	119,919	149,261	149,261	49,127	19,785	49,127
Total 7 Legumes	1,622,988	1,639,552	1,533,133	498,444	593,110	593,110	11,186	11,186	11,186	2,166,496	2,391,137	2,124,450	1,500,060	1,637,768	1,637,768	623,390	496,882	623,390
Timothy	38,397	25,890	33,362	13,725	16,339	10,665	4,703	2,564	0	56,825	44,793	44,047	42,758	33,030	33,030	1,289	11,017	11,017
Orchardgrass	11,140	10,010	16,530	4,416	5,010	4,151	5,073	4,333	711	20,629	19,353	21,402	15,761	14,975	14,975	5,641	6,427	6,427
Redtop	4,554	3,840	4,485	2,771	2,071	1,741	1	0	0	7,326	5,911	6,229	4,567	3,546	3,546	1,662	2,683	2,683
Kentucky Bluegrass	17,484	9,163	20,450	5,630	11,518	3,567	525	450	11	23,639	21,131	24,028	16,598	16,602	16,602	7,430	7,438	7,438
Merion Kentucky Bluegrass	4/ 591	1,757	2,181	4/ 147	161	161	0	0	0	7,738	1,918	2,704	4/ 577	2/ 1,200	2/ 1,200	2,127	1,504	1,504
Chewings Fescue	5,230	5,100	6,660	2,245	4,717	2,738	455	132	0	7,980	9,949	9,368	4,935	6,461	6,461	4,463	2,937	2,937
Red Fescue	2,550	2,056	3,030	2,559	4,368	2,350	6,045	5,438	724	11,164	11,862	6,104	7,818	8,532	8,532	3/ 1,714	2,428	2,428
Tall Fescue	34,169	22,926	21,543	14,953	20,565	11,329	0	0	0	49,132	43,491	32,872	29,532	2/ 31,412	2/ 31,412	3,340	1,460	1,460
Bentgrass	3,108	5,670	6,550	1,254	1,978	3,011	139	11	0	4,501	7,659	9,561	3,029	2/ 4,148	2/ 4,148	6,532	5,413	5,413
Smooth Bromegrass	10,606	5,920	27,060	8,443	5,598	1,986	8,154	3,746	5	27,203	15,264	29,051	19,866	2/ 13,178	2/ 13,178	9,185	15,873	15,873
Crested Wheatgrass	1,982	3,396	8,225	1,283	1,113	741	197	18	3	3,462	4,527	8,969	2,308	2/ 3,586	2/ 3,586	6,661	5,393	5,393
Sudangrass	53,568	54,135	92,197	6,743	27,661	22,408	122	0	0	60,453	81,796	114,605	49,903	2/ 59,888	2/ 59,888	64,702	55,717	55,717
Total 12 Grasses	183,469	149,863	242,293	64,179	101,119	65,220	25,414	16,692	1,457	273,052	267,674	308,370	197,652	195,558	195,558	111,318	113,412	113,412
Austrian Winter Peas	41,586	32,685	36,445	103,420	11,067	13,458	0	0	0	145,006	43,752	51,903	44,640	30,294	30,294	7,263	21,609	21,609
Lupine	25,320	15,412	16,810	63,632	3,511	1,364	23	7	0	88,975	18,950	18,174	25,946	17,566	17,566	3/ 7,772	608	608
Crimson Clover	21,324	14,985	14,320	4,250	1,327	1,572	6,185	0	2,088	31,649	16,312	17,780	27,467	2/ 14,640	2/ 14,640	9,697	3,140	3,140
Hairy Vetch	42,007	26,185	17,280	23,994	8,558	11,501	495	16	0	66,496	34,759	28,581	42,912	23,458	23,458	3/ 14,331	5,123	5,123
Common Vetch	12,705	2,720	5,900	14,671	1,965	2,130	741	1,418	0	28,117	6,103	8,030	13,358	3,973	3,973	5,328	4,057	4,057
Purple Vetch	6,644	13,600	9,360	1,966	1,399	2,088	0	0	0	8,610	14,999	11,448	6,700	12,911	12,911	3/ 4,463	1,463	1,463
Common Ryegrass	63,944	89,000	69,920	14,076	43,706	41,239	256	56	0	104,276	132,762	111,159	79,156	2/ 85,523	2/ 85,523	32,003	25,636	25,636
Perennial Ryegrass	19,076	43,050	37,050	2,886	8,367	15,570	3,154	33	0	24,116	51,450	52,520	19,215	2/ 31,880	2/ 31,880	33,405	20,740	20,740
Total 8 Winter Cover Crops	257,516	237,637	209,085	228,895	79,300	88,522	10,834	1,530	2,088	497,245	319,067	299,695	259,394	220,245	220,245	40,301	79,450	79,450
Grand Total 27 Crops	875,376	827,114	875,507	424,305	348,770	298,376	62,312	29,408	6,221	1,361,993	1,205,232	1,180,104	897,910	865,624	865,624	282,194	314,480	314,480

Source: U.S.D.A. - CROP REPORTING BOARD  
November 1957

Prepared as background material for the Seed Commodity Session of the 35th Annual National Agricultural Outlook Conference, Washington, D. C., November 18 - 22, 1957.

1/ July 1 to June 30 except 1957-58 which is July 1 - Sept. 30.  
2/ Estimated.  
3/ Deficit  
4/ Short-time average



**\$4.7**  
BILLION

**The  
Problem of**

***Maintaining  
High Level  
Agricultural  
Exports***

**CHARTS  
AND MAPS**

UNITED STATES DEPARTMENT OF AGRICULTURE  
Foreign Agricultural Service    Washington, D. C.  
November 1957



# Preface

In this publication, "Maintaining High Level Agricultural Exports," Foreign Agricultural Service presents its annual series of charts and maps showing the status of U.S. agricultural exports.

The publication is divided into four sections: (1) Level of Exports; (2) Significance of Exports; (3) Factors Supporting High Exports; and (4) Situation by Commodities.

For reader convenience, tabular material has been placed adjacent to the charts.

All charts are available in either colored or black and white film strips, or as individual slides. Instructions for ordering are given on page 46.

A complete list of charts and maps, by page and Section, starts on page 44.

# CONTENTS

<i>Section</i>	<i>Page</i>
I Level of Exports. . . . .	5
II Significance of Exports. . . . .	11
III Factors Supporting High Exports. .	15
IV Situation by Commodities. . . . .	25
Cotton. . . . .	27
Grains. . . . .	30
Tobacco. . . . .	34
Dairy Products. . . . .	36
Fats and Oils. . . . .	38
Livestock Products. . . . .	41
Fruits and Vegetables. . . . .	42
List of Charts and Maps. . . . .	44
How to Order Charts and Maps. . . . .	46

## Export Highlights

American agricultural exports in fiscal year 1957 were the equivalent of the production of 60 million acres. This meant, in effect, that products equivalent to the output of one acre in five of U.S. cropland moved to foreign customers.

One of the big challenges facing American agriculture is how to maintain a high level of exports, comparable to those of the record-breaking fiscal year 1957.

Economic signs point toward decreased U.S. agricultural exports in fiscal year 1958. One important indicator is that some countries, although in the midst of boom conditions, have declining gold and dollar reserves. Simply stated, this means less financial ability to buy U.S. farm products.

Countries with declining dollar reserves tend to restrict imports from dollar countries. One assurance of favorable treatment for U.S. farm products comes from the reciprocal trade agreements program. As pointed out in this publication, nearly 80 percent of U.S. agricultural exports go to trade agreement countries, and two-thirds of such exports move under trade concessions granted by these importing countries. GATT (General Agreement on Tariffs and Trade) minimizes the arbitrary and capricious setting up of trade barriers. Under it, member countries may impose trade restrictions only under specified conditions and with the consultation of other member countries.

The challenge to U.S. agriculture in meeting and maintaining the export level of fiscal year 1957 is a great one. The all-time high export value of \$4,724 million was 17 percent above the previous record of \$4,053 million in fiscal year 1952, and 35 percent above the \$3,494 million in 1956.

Export quantity also set a record last year. It exceeded 1956 by 39 percent. It surpassed 1919, the previous record year, by 31 percent. Export records were set for wheat, rice, soybeans, and edible vegetable oils. Cotton exports were highest since 1934.

Factors supporting exports included: Abundant U.S. supplies; economic expansion and prosperity abroad, particularly in West Europe and Japan; Commodity Credit Corporation sales for export at competitive world prices; sales for foreign currencies under Public Law 480; lower production of some crops abroad.

Two commodities--cotton and wheat--predominated in the gain over 1956. Cotton accounted for 61 percent of the value rise; wheat, 30 percent.

Ten countries--5 in Europe, 4 in Asia, 1 in North America--figured in 80 percent of the gain. Also, the U.S. shipped substantial quantities of farm products to more countries than ever before.

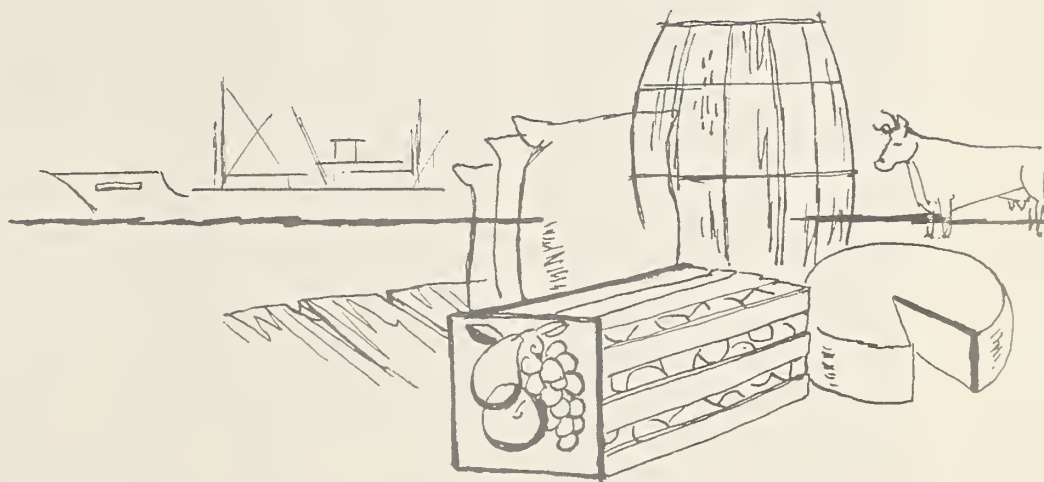
Exports under commercial sales (excluding special Government programs) made up 60 percent of the total; exports under special Government programs, 40 percent. Commercial sales increased to \$2.8 billion in 1957, compared with \$2.1 billion in 1956.

Three-fourths of surplus disposals from CCC holdings were through export in 1957. CCC moved \$2.2 billion of farm products into export outlets. Exports accounted for practically all disposals of upland cotton and for more than three-fourths of wheat, rye, barley, beans, and nonfat dry milk solids.

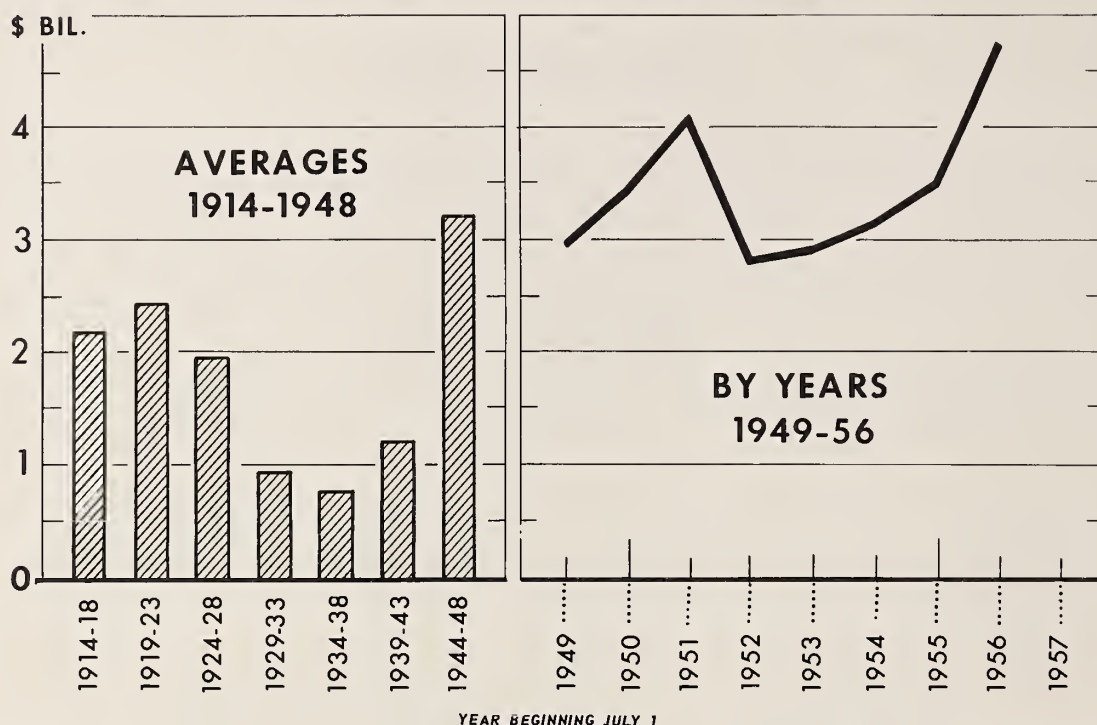


## Section I

# LEVEL OF EXPORTS



# U. S. Agricultural Exports at All-Time High



USDA

FAS-NEG. 1419

The United States exported more farm products in fiscal year 1957 (the year ending June 30, 1957) than ever before in history. U.S. agricultural exports rose to \$4.7 billion; 12 cents of each marketing dollar received by U.S. farmers came from exports. It was the fourth year of constantly rising exports. It marked a successful reversal of the export slump of 1952, the aftermath of "scare" buying due to the Korean conflict. Due in important part to large-volume ex-

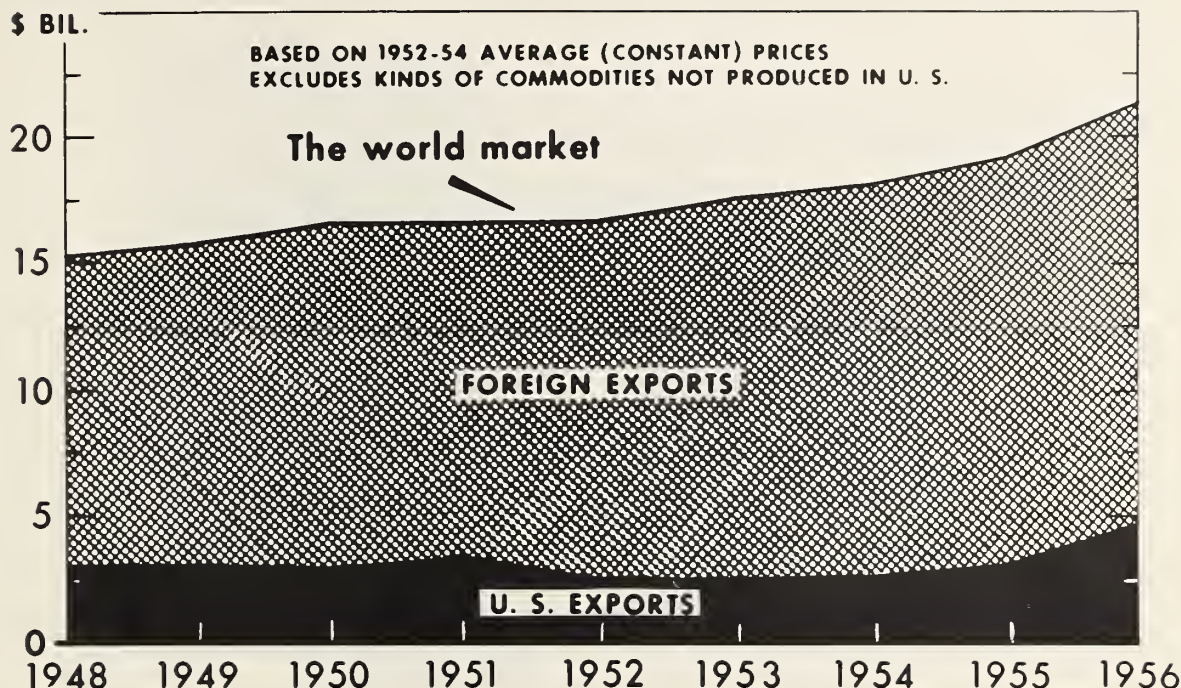
ports this past year, the surplus of agricultural products--which had been climbing--was appreciably reduced. When computed at "constant prices" to eliminate trends due to changes in value of the dollar, exports in the 1947-57 decade were at about the same level as in the boom years of the late 1920's, and in the years immediately following World War II when much of U.S. agricultural exports were financed by foreign aid.

At "constant prices" the quantity of fiscal year 1957 exports was 39 percent above that of fiscal year 1956.

U. S. agricultural exports:  
Value by year,  
years beginning July 1, 1914-56

Year	Value
Million dollars	
Average:	
1914-18.....	2, 163
1919-23.....	2, 407
1924-28.....	1, 948
1929-33.....	933
1934-38.....	748
1939-43.....	1, 184
1944-48.....	3, 199
Annual:	
1949.....	2, 986
1950.....	3, 411
1951.....	4, 053
1952.....	2, 819
1953.....	2, 936
1954.....	3, 144
1955.....	3, 494
1956.....	4, 724

# U. S. Increases Its Share of World Agricultural Trade



USDA

FAS-NEG. 1425

The U.S. has continued to strengthen its position in world trade. In the 1956-57 marketing year, U.S. exports of farm products accounted for 22 percent of world agricultural exports. In the previous year, the U.S. share was 16 percent. Exports of farm products also reached a new peak. They rose at the same rate last year as in the past several years. World agricultural exporters are enjoying unprecedented high levels of trade. They are trad-

Value of world agricultural exports of commodities commercially produced in the United States at constant prices, 1948-56 <sup>1/</sup>

Year <sup>2/</sup>	U. S. : exports	Foreign : exports	World : exports
Billion dollars			
1948....	3.1	12.1	15.2
1949....	3.1	12.6	15.7
1950....	3.0	13.5	16.5
1951....	3.4	13.1	16.5
1952....	2.5	14.0	16.5
1953....	2.5	15.0	17.5
1954....	2.6	15.5	18.1
1955....	3.1	16.1	19.2
1956....	4.7	16.6	21.3

<sup>1/</sup> 1952-54 average prices.

<sup>2/</sup> Year beginning August 1 for cotton; July 1 for wheat, rye, oats, corn, barley, and sorghum grains; Jan. 1 for other commodities.

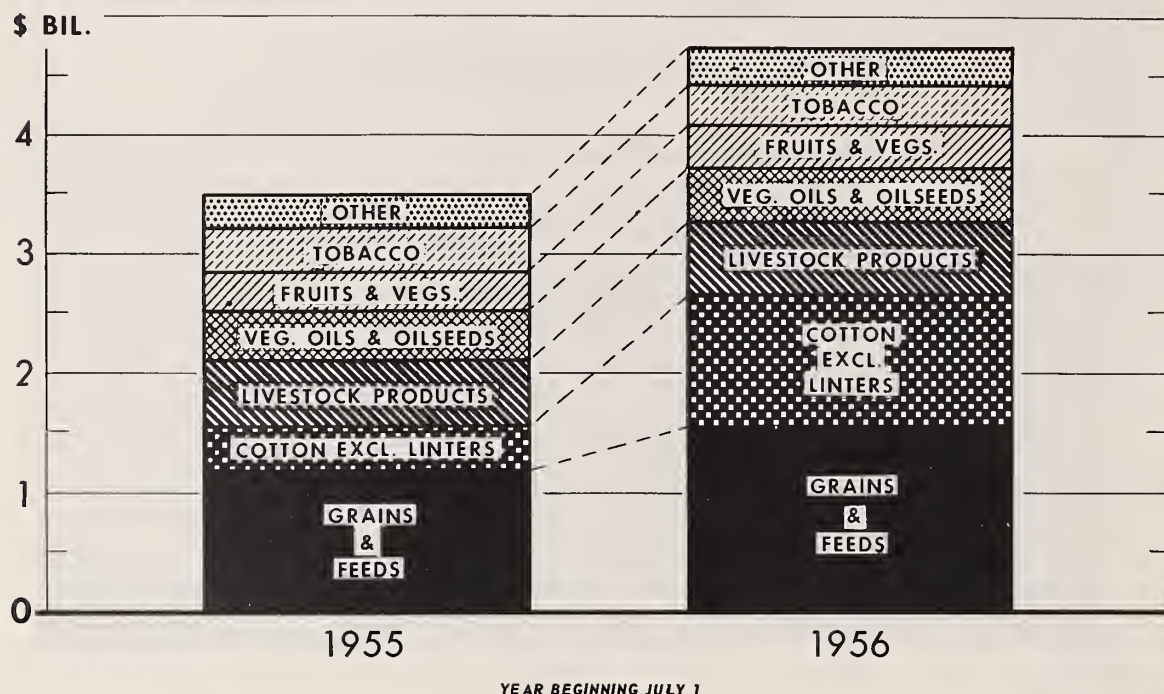
ing more farm products than ever before. From 1951 to 1955 foreign exports gained, while U.S. exports lagged; the U.S. became a residual sup-

plier to the foreign agricultural market. Revisions in U.S. export policies are restoring the competitive position of many U.S. farm products. With cotton now sold competitively, exports have soared.

Annual increase in foreign exports in 1954-56 was about \$1 1/2 billion; in prior years, \$1 billion. In 1954-56 U.S. exports rose more than foreign exports. However, the sharp increase in the U.S. share in 1956 was a readjustment.



# Cotton and Grains Are Largest Exports



USDA

FAS-NEG. 1420

Grains and feeds, the largest group of agricultural exports, accounted for 33 percent of the exports in fiscal year 1957, compared with 34 percent the previous year.

Cotton (excluding linters), usually the largest single agricultural export, made up 24 percent of 1957 exports. The figure was 11 percent in 1956 when cotton exports were extraordinarily low.

Of the grains, wheat was the largest, followed by coarse grains

(corn, barley, oats, and grain sorghums), rice, and feeds and fodders (mainly protein meals).

Share of livestock exports was 13 percent in 1957; 16 percent in 1956. Vegetable oils and oilseeds accounted

for 10 percent of 1957 exports; 12 percent in 1956.

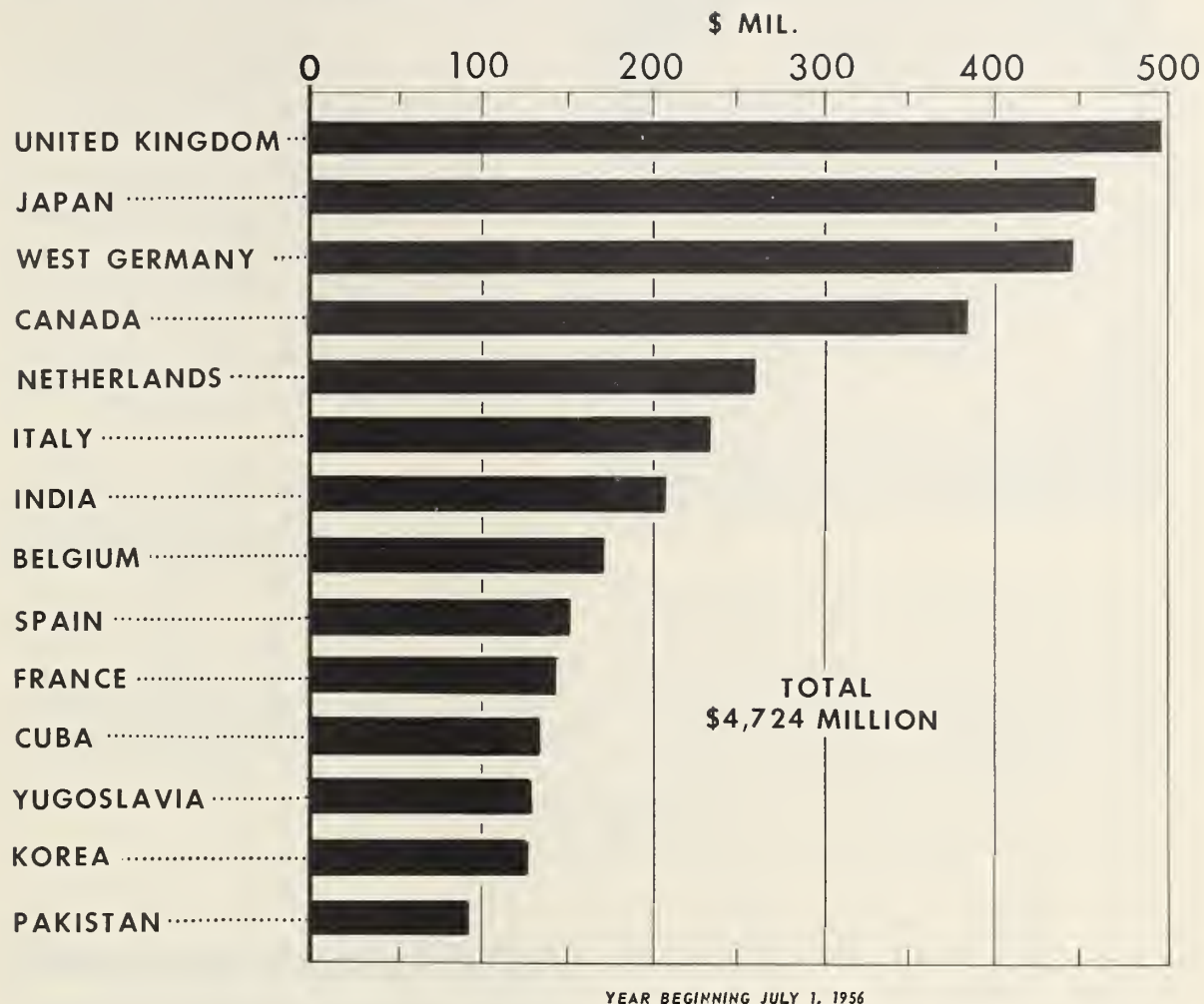
Fruits and vegetables accounted for 8 percent of 1957 exports; 9 percent in 1956.

Tobacco's share was 7 percent in 1957; 11 percent in 1956.

U. S. agricultural exports: Composition, years beginning July 1, 1955 and 1956

Commodity	1955	1956
Million dollars		
Grains and feeds.....	1,178	1,553
Cotton, excluding linters.....	372	1,115
Livestock products.....	550	605
Vegetable oils, oilseeds.....	410	454
Fruits and vegetables.....	327	363
Tobacco.....	379	340
Other.....	278	294
Total.....	3,494	4,724

# 72 % U. S. Agricultural Exports Go to 14 Markets



USDA

FAS-NEG. 1423

Although U.S. agricultural exports go to almost every country in the world, 5 countries accounted for 43 percent of the total in fiscal 1957: United Kingdom, Japan, W. Germany, Canada, and Netherlands. Their share was somewhat smaller than the previous 45 percent in 1956

U. S. agricultural exports: Main outlets by country, 1956

	Million dollars
United Kingdom.....	497
Japan.....	458
West Germany.....	445
Canada.....	384
Netherlands.....	260
Italy.....	231
India.....	205
Belgium.....	170
Spain.....	150
France.....	142
Cuba.....	134
Yugoslavia.....	128
Korea.....	126
Pakistan.....	93
Others.....	1,301
Total.....	4,724

and 50 percent in 1955. Other countries are be-

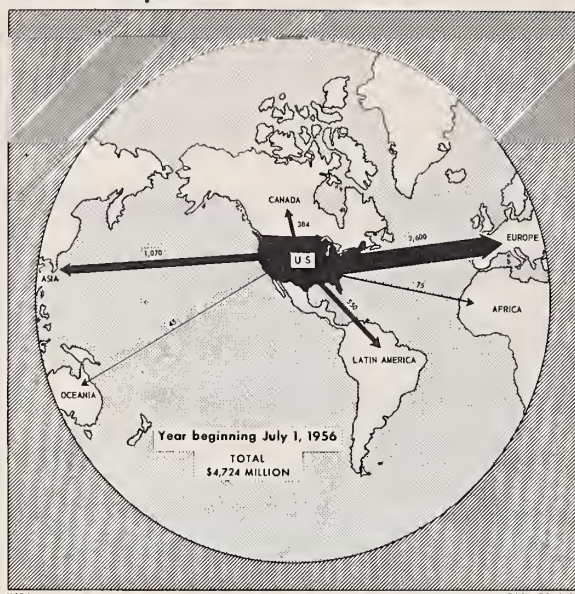
coming more important as markets for U.S. farm products.

In fiscal year 1957 more than 70 percent of U. S. agricultural exports went to the 14 countries on the adjacent chart.

Except for Pakistan, they each took U. S. commodities valued at more than \$125 million.



## West Europe Continues as No. 1 Farm Export Market



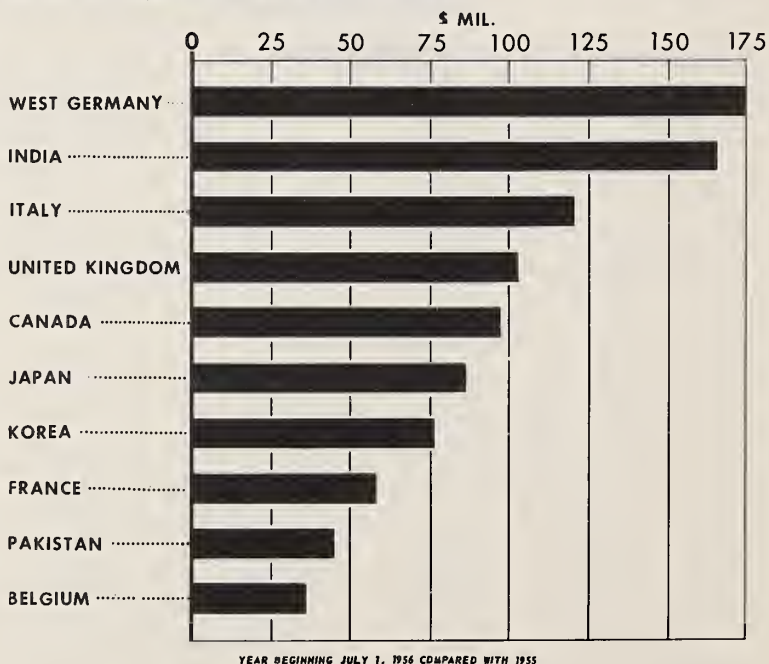
Ten countries played the major roles in last year's increase in United States agricultural exports. They accounted for nearly 80 percent of the increase in such exports since fiscal year 1956. Exports to each of four countries rose more than \$100 million. They are West Germany, India, Italy, and the United Kingdom. With other countries also sharing in the export increase, the United States in fiscal year 1957 shipped substantial amounts of its farm products to more countries than ever before. Cotton and grains figured most prominently in the increased exports to the 10 countries listed.

Europe is traditionally the principal export market for U.S. agricultural exports. Of the \$4.7 billion export total in fiscal 1957, over half went to Europe, mainly Western Europe. Asia and the Western Hemisphere also were important outlets, accounting for 26 and 16 percent, respectively, of the 1957 total. In general, the more developed regions of the world are the major outlets for U.S. agricultural exports. Europe is the most important outlet for many commodities, especially wheat, feed grains, cotton, tobacco, and vegetable oils.

Main countries in U.S. export increase, years beginning  
July 1, 1955 and 1956

Country	1955	1956	Increase
Million dollars			
West Germany.....	270	445	175
India.....	40	205	165
Italy.....	111	231	120
United Kingdom.....	395	497	102
Canada.....	287	384	97
Japan.....	372	458	86
Korea.....	50	126	76
France.....	84	142	58
Pakistan.....	48	93	45
Belgium.....	134	170	36
Total 10 countries.....	1,791	2,751	960

## 10 Countries Account for 78 % of U. S. Agricultural Export Gain



USDA

FAS-NEG. 1421

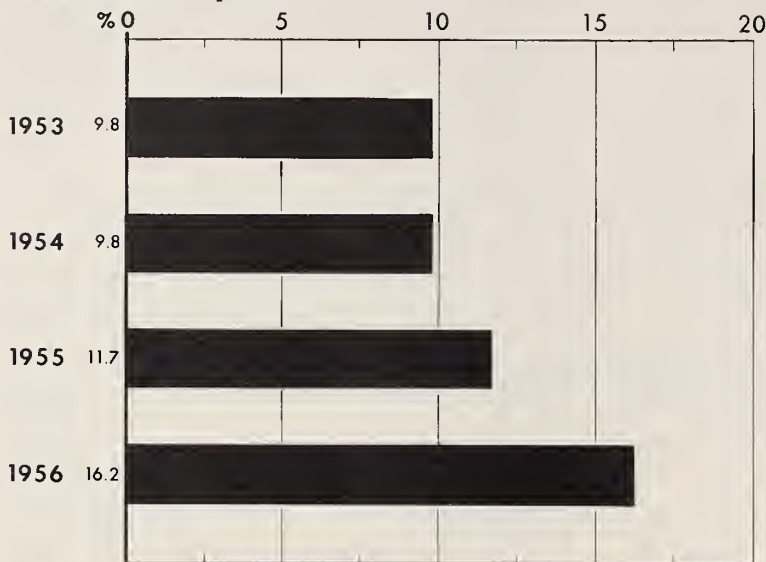


## Section II

# SIGNIFICANCE OF EXPORTS



## One Harvested Acre of Six Produces for Export



USDA

FAS-NEG. 1411

In supplying the record agricultural exports of 1956, the equivalent of 1 U.S. harvested acre of every 6 produced for foreign customers. In supporting last year's record level exports, the production of approximately 50 million acres of cropland moved to foreign customers. In 1921, about 1 acre of every 5 produced for export. In 1941, when exports were low, the ratio was 1 to 26.

12 Cents  
of Each  
Farm Dollar  
Comes  
from Exports



FARM VALUE OF EXPORTS  
AS PERCENT OF NET FARM PRODUCTION

Amount is much  
higher for  
some crops



	¢
● Rice	55
● Wheat	51
● Soybeans	35
● Cotton	32
● Tobacco	23

USDA

FAS-NEG. 1409

Part of practically every crop grown in the United States is exported, but the share is much larger for some. In 1956, an average of 12 cents of each farm dollar came from that part of farm production exported. The share for some of the more important crops, computed on the basis of export volume, are: rice, 55 cents; wheat, 51 cents; soybeans, 35 cents; cotton, 32 cents; and flue-cured tobacco, 23 cents. The share of the farm dollar coming from exports of all crops grown in the U.S. has fluctuated widely over the years, from 27 cents in 1920 to a low of 6 cents in 1941.

United States agricultural production and exports: Index numbers, 1937-56

(1937 = 100)		
Year	Production (1/)	Exports (2/)
1937.....	100	100
1938.....	96	82
1939.....	97	90
1940.....	101	36
1941.....	105	70
1942.....	117	79
1943.....	114	96
1944.....	118	92
1945.....	117	138
1946.....	120	144
1947.....	116	126
1948.....	126	158
1949.....	124	145
1950.....	122	145
1951.....	125	164
1952.....	130	119
1953.....	132	127
1954.....	133	142
1955.....	137	159
1956.....	138	231

1/ Crop year.  
2/ Fiscal year.

The value indexes of U.S. agricultural production and exports reached record levels in 1956. The export

Percent of U.S. harvested acreage used for export crops, was higher in 1956 (16.2%)

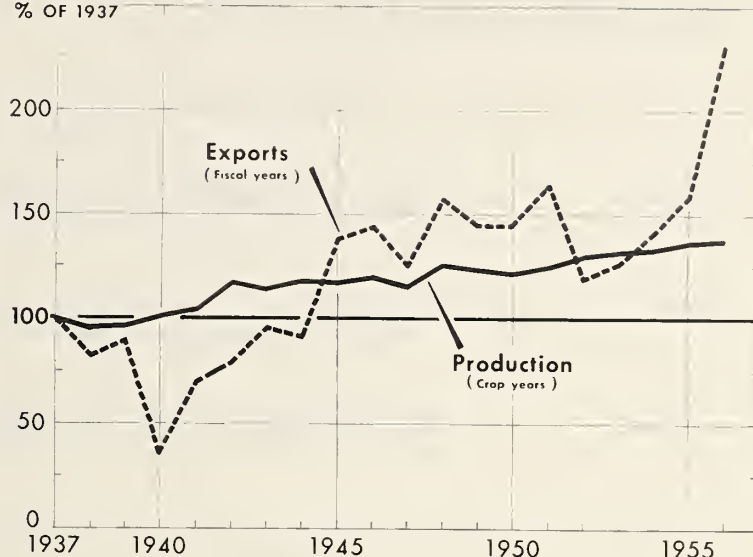
United States agricultural exports: Harvested acreage and relation of value to farm income, 1937-56

Year	Ratio exports to income 1/	Percent of acreage for exports
1937.....	9.0	8.1
1938.....	10.7	6.0
1939.....	8.4	7.0
1940.....	6.2	4.1
1941.....	6.0	3.8
1942.....	7.7	4.9
1943.....	10.8	7.0
1944.....	10.5	6.7
1945.....	10.7	11.3
1946.....	12.9	13.0
1947.....	13.1	13.4
1948.....	11.5	12.0
1949.....	12.8	13.7
1950.....	10.0	10.7
1951.....	12.3	15.7
1952.....	10.5	12.3
1953.....	9.0	9.8
1954.....	10.2	9.8
1955.....	11.0	11.7
1956.....	14.0	16.2

1/ Value of agricultural exports includes farm value plus all subsequent marketing charges.

## Farm Production and Exports at All-Time High

% OF 1937



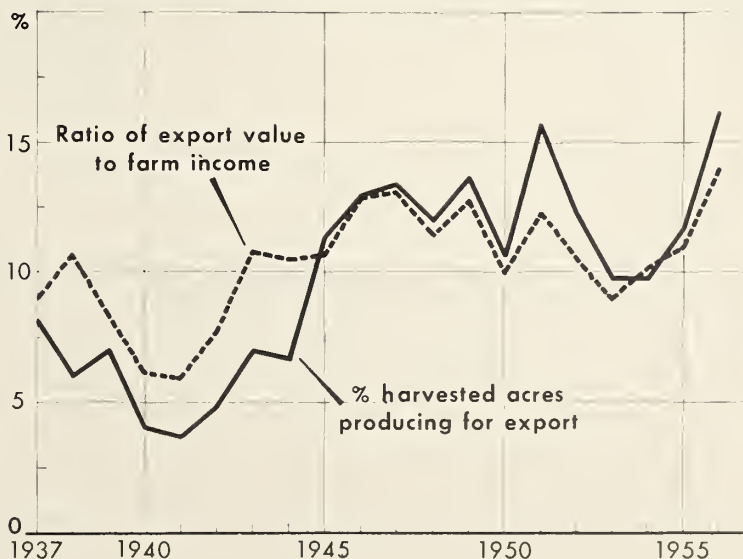
USDA

FAS-NEG. 1407

index of 231 is nearly 7 times that of 1940 (1937=100), thus indicating the high demand for U.S. farm products abroad and the prosperity of U.S. export customers.

than in any year since 1921. Export value-to-income ratio was higher in 1956 than in any year since 1932.

## Exports Important Part of Acreage Use and Farm Income

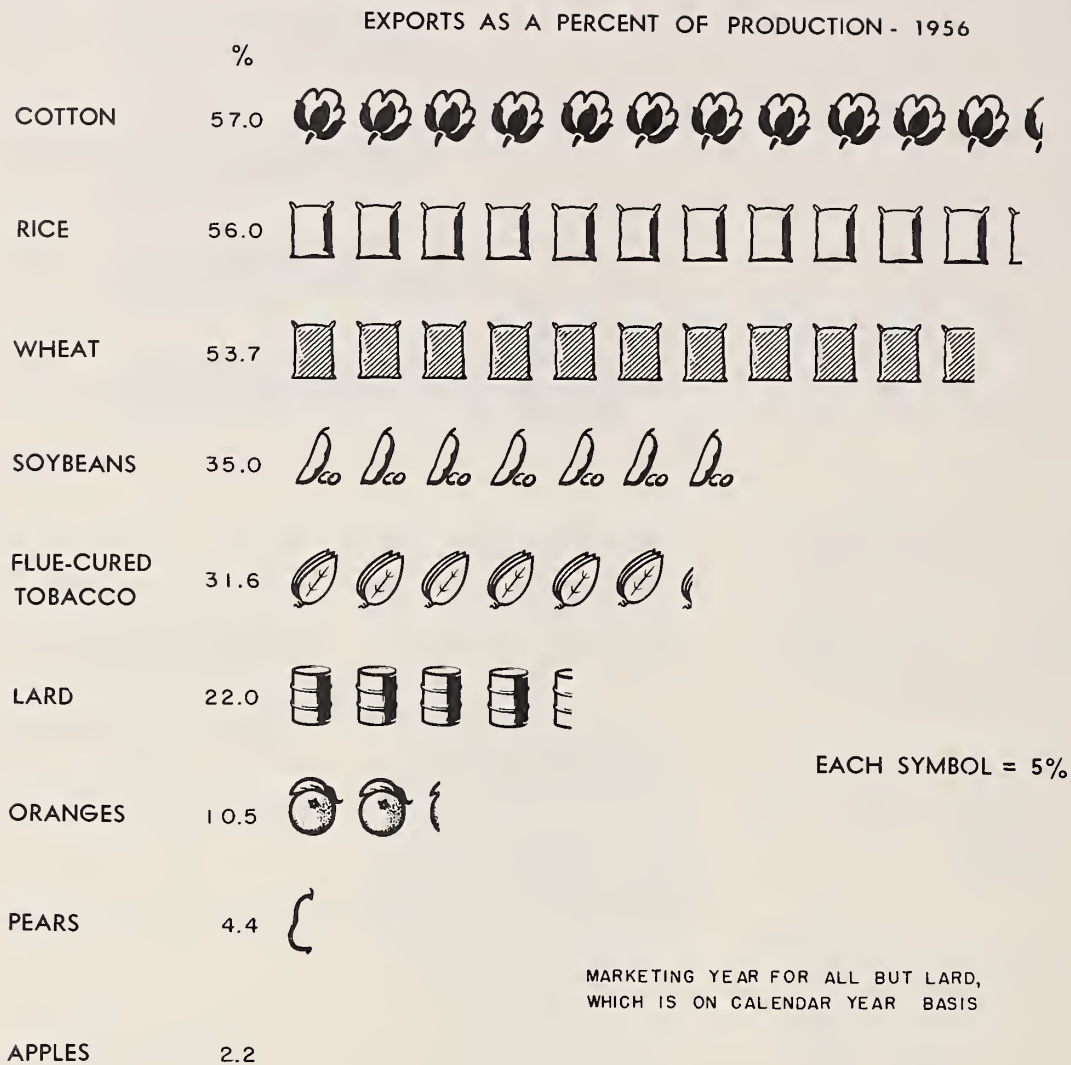


USDA

FAS-NEG. 1408



# Major U. S. Crops Benefit From Exports



USDA

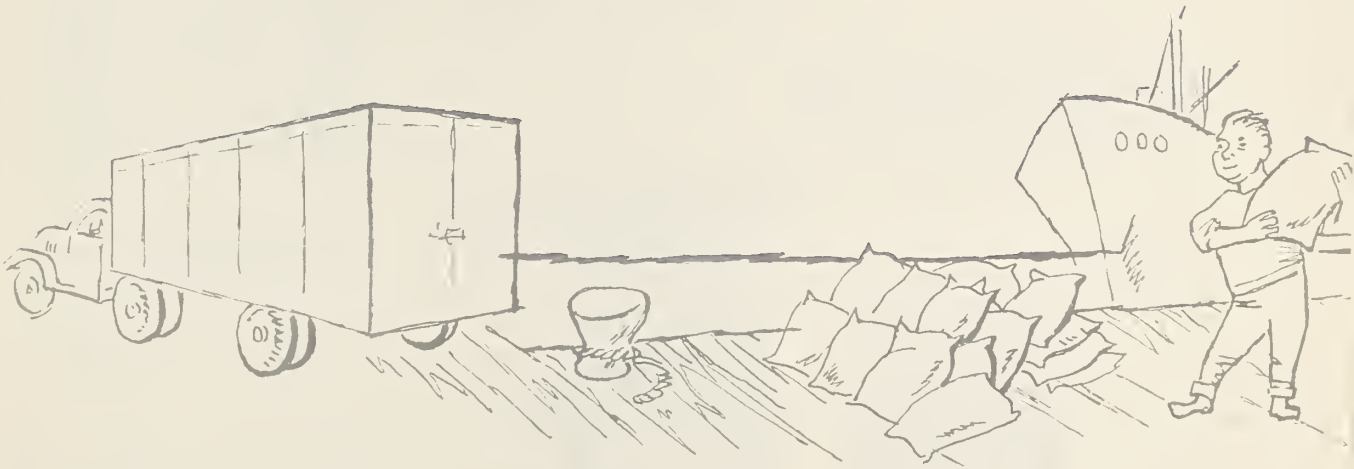
FAS-NEG. 1410

In 1956 the equivalent of more than one-half of the U.S. annual production of cotton, rice, and wheat was exported. Cotton exports during the year amounted to 57 percent of the production, or the highest in more than 30 years. (In 1921, however, more than 75 percent of U.S. cotton production was exported.) Percentage of the milled rice crop exported has ranged from 5 percent in 1925 to 56 percent in 1956.

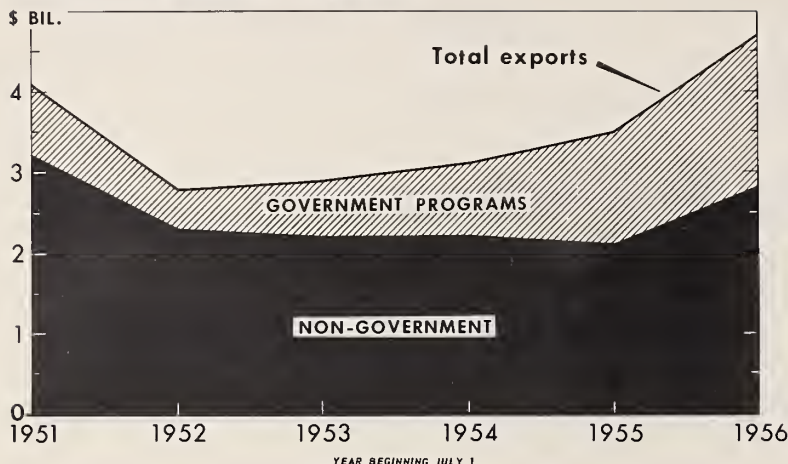
In 1956 wheat exports were the equivalent of 54 percent of production, the highest on record. Shifts upward in 1956 exports of U. S. farm products were especially great for cotton, rice, and wheat.

## Section III

# FACTORS SUPPORTING HIGH EXPORTS



## 40% U. S. Agricultural Exports Under Government Programs



USDA

FAS-NEG. 1446

U. S. agricultural exports under Government programs and outside Government programs, years beginning July 1, 1951-56

Year	Outside programs	Under programs <sup>1/</sup>	Total exports
	Billion dollars		
1951...	3.2	0.9	4.1
1952...	2.3	0.5	2.8
1953...	2.2	0.7	2.9
1954...	2.2	0.9	3.1
1955...	2.1	1.4	3.5
1956...	2.8	1.9	4.7

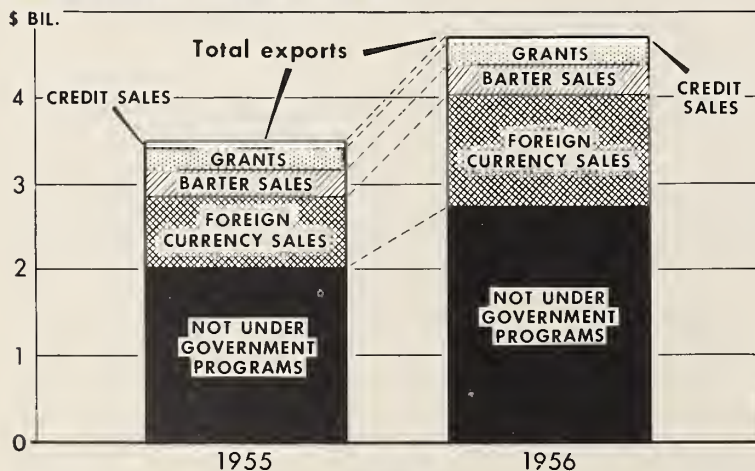
<sup>1/</sup> P. L. 480, Mutual Security Act., Export-Import Bank.

Although 40 percent of U.S. agricultural exports were under Gov-

Foreign currency sales accounted for 27 percent of U.S. agricultural exports in fiscal year 1957: 19 percent under Title I of P. L. 480 and 8 percent

ernment programs in fiscal year 1957, more U.S. agricultural exports also moved as commercial sales than in any of the preceding 4 years. Commercial sales of agricultural commodities increased about \$700 million over 1956. They made up about 60 percent of total agricultural exports in each year. The large growth in Government program exports in the past 2 years was due primarily to shipments under Public Law 480.

## Agricultural Exports Not Under Government Programs Up 34 %



USDA

YEAR BEGINNING JULY 1

FAS-NEG. 1445

under Section 402 of P. L. 665. Barter sales amounted to 7 percent of fiscal year 1957 exports; grants (emergency relief and welfare donations), 5 percent. Credit sales, made mainly through the Export-Import Bank, made up 1-1/2 percent of the total amount.

U. S. agricultural exports under specified Government programs and outside Government programs, years beginning July 1, 1955 and 1956

	1955	1956
	Million dollars	
Foreign currency sales <sup>1/</sup>	806	1,275
Barter sales <sup>2/</sup>	298	350
Grants <sup>3/</sup>	270	250
Credit sales <sup>4/</sup>	60	70
Total	1,434	1,945
Other	2,060	2,779
GRAND TOTAL	3,494	4,724

<sup>1/</sup> Title I, P. L. 480; Sec. 402, P. L. 665 Mutual Security Act.

<sup>2/</sup> Title III, P. L. 480 and other legislation.

<sup>3/</sup> Titles II and III, P. L. 480 (includes Sec. 416).

<sup>4/</sup> Export-Import Bank loans.



U.S. agricultural products exported under Government programs and outside Government programs, year beginning July 1, 1956

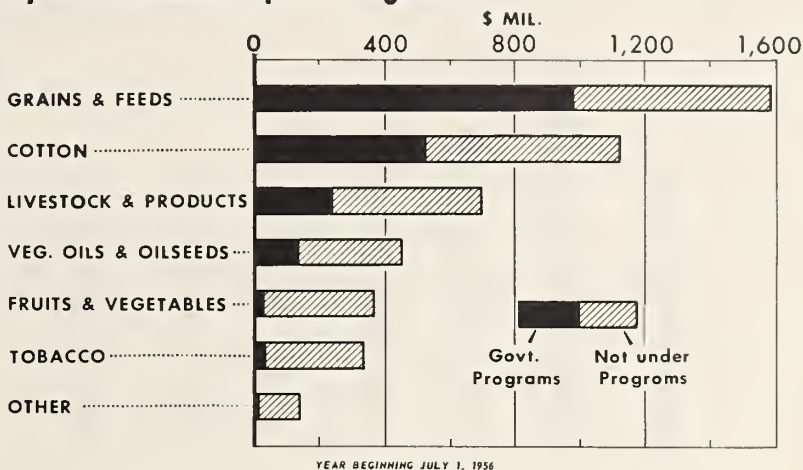
Products	Under : :pro-grams	Outside : :pro-grams	Total : :exports
	Mill. dol.	Mill. dol.	Mill. dol.
Grains and feeds	980	620	1,600
Cotton	525	590	1,115
Livestock products	240	460	700
Veg. oils and oilseeds	135	320	455
Fruits and vegetables	25	338	363
Tobacco	30	310	340
Other	10	141	151
Total	1,945	2,779	4,724

1/ P.L. 480, Mutual Security, Export-Import Bank.

2/ Estimated shipments for relief or charity by private agencies and individuals, mostly CCC donations, are distributed among commodity groups.

Shortage of dollars in foreign countries, and bilateral and regional trading arrangements that have developed abroad, are a major problem in expanding U.S. agricultural export sales for dollars. U.S. Government export programs now in use help dollar-short foreign customers ob-

## Grain and Cotton Helped Most by Government Export Programs



USDA

FAS-NEG. 1444

tain U.S. commodities. In fiscal year 1957 \$980 million worth of grains, or 61 percent of all grain exports, moved under specified programs. Cotton shipments under programs were \$525 million, or 57 percent

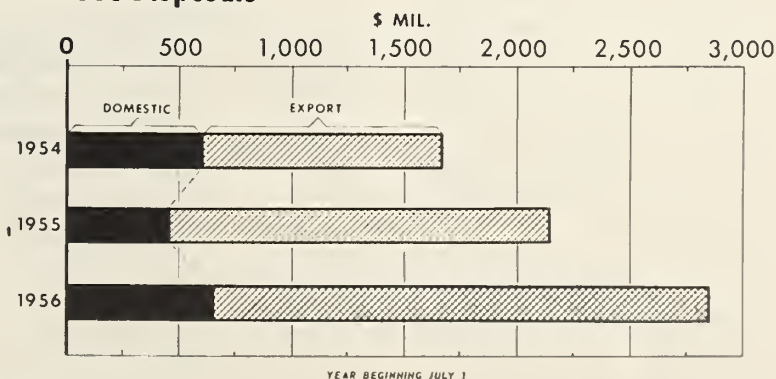
of all cotton exported. Big amounts of other U.S. farm products moved abroad last year under special Government programs, especially livestock products, vegetable oils, and fruits and vegetables.

Three-fourths of surplus farm product disposals by the Commodity Credit Corporation in fiscal year 1957 were through export channels (valued at \$2,197 million). The export value of CCC commodities act-

ually shipped in 1956 was \$1,687 million. Export sales of CCC-held commodities have

been emphasized since such disposals are not competitive with domestic marketing.

## Foreign Market Main Outlet for CCC Disposals



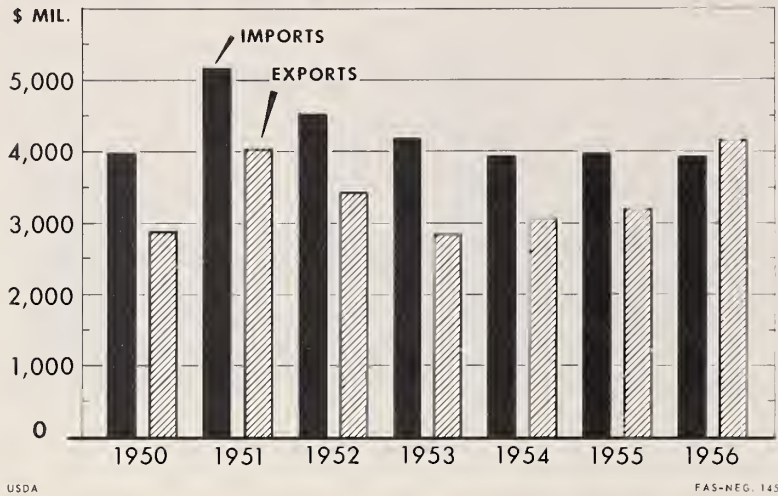
USDA

FAS-NEG. 1467

CCC disposition commitments years beginning July 1, 1954-56

Year	Domestic : disposal	Export : disposal	Total : disposal
	Million dollars	Million dollars	Million dollars
1954.....	604	1,069	1,673
1955.....	453	1,687	2,140
1956.....	654	2,197	2,851

## U. S. Agricultural Trade Balance Shifts: Exports Now Exceed Imports



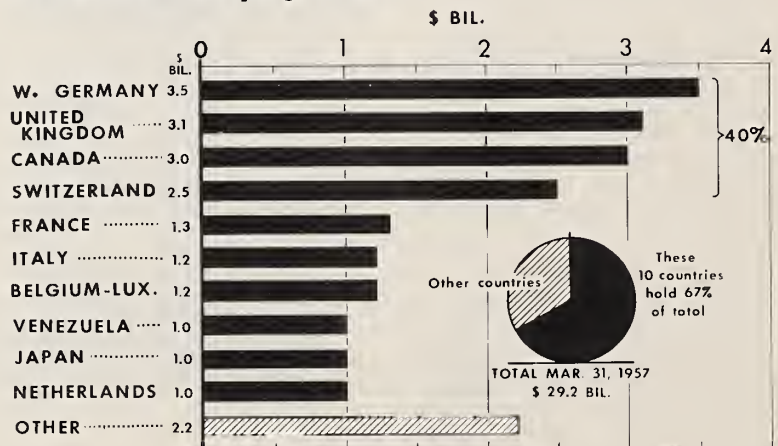
U.S. agricultural exports in 1956 totaled \$4.2 billion, an all-time calendar-year high. They exceeded U.S. agricultural imports (by \$0.2 billion) for the first time since 1949.

The deficit that results from an excess of total U.S. exports over imports has to be covered from foreign countries' dollar receipts or from accumulated dollar reserves. In postwar years, some countries have not had adequate dollar reserves.

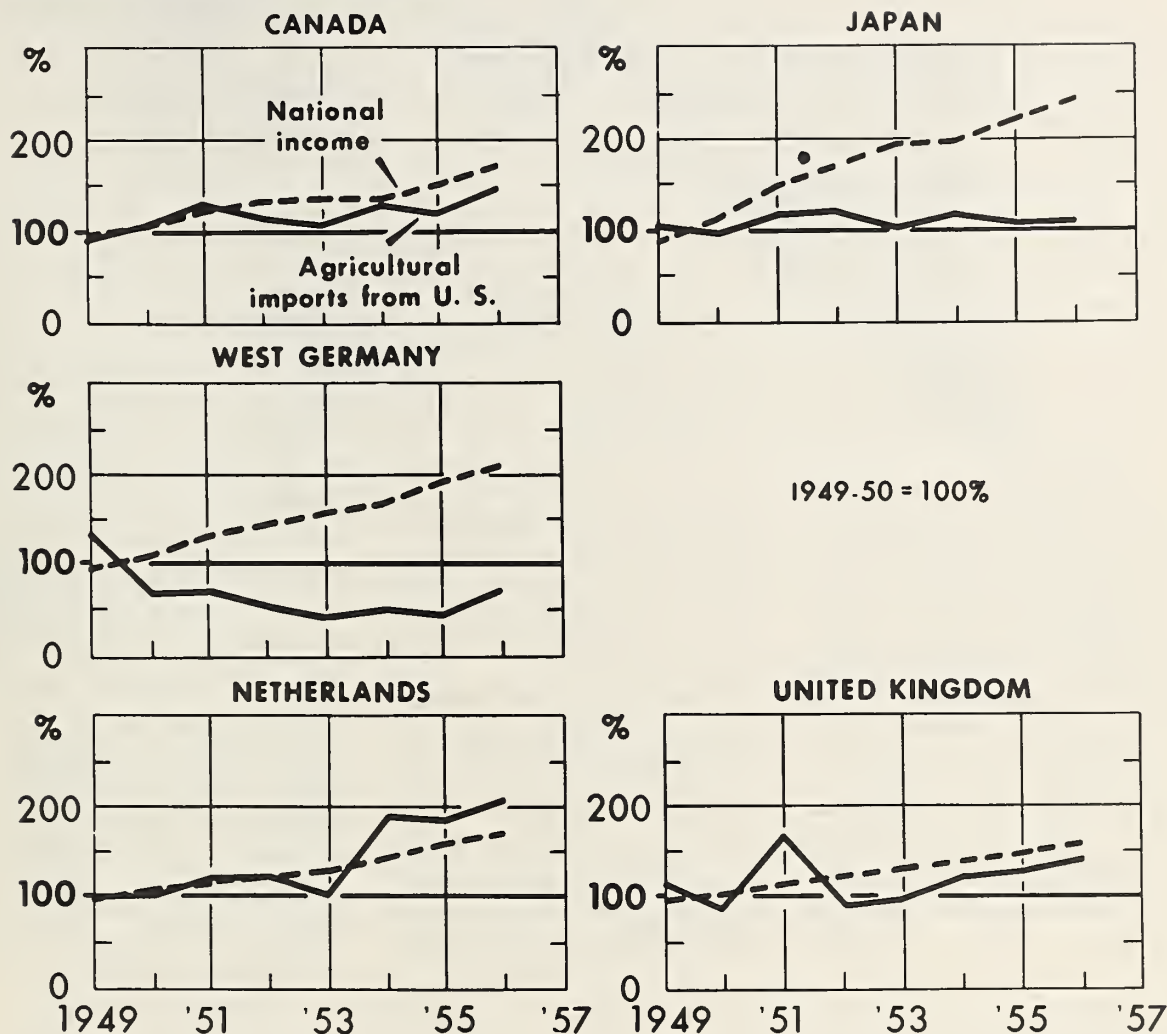
Their trade deficits have been offset by U.S. economic loans and grants, U.S. military expenditure, U.S. private capital, and loans from international institutions.

What foreign countries can buy from the United States is limited by how many dollars and how much gold they have. When gold and dollar holdings rise, U.S. foreign trade outlook is brighter; when they decline, U.S. sales will suffer as foreign belts are tightened. Holdings outside the U.S. are about \$29 billion, half gold and half dollars. They are mainly held by a few countries, which also are good customers for U.S. farm products. Gold and dollar holdings, on an upward trend from 1949 to 1956, turned downward in 1957, resulting in new restrictions on imports from the U.S.

## Four Countries Hold 40% of World Dollar Buying Power



# National Income High Among Best Customers



USDA

FAS-NEG. 1461

National income and national purchasing power normally are higher in industrialized countries than in so-called agricul-

tural countries. The 5 best customers for U.S. farm products (see chart) are considered industrialized countries.

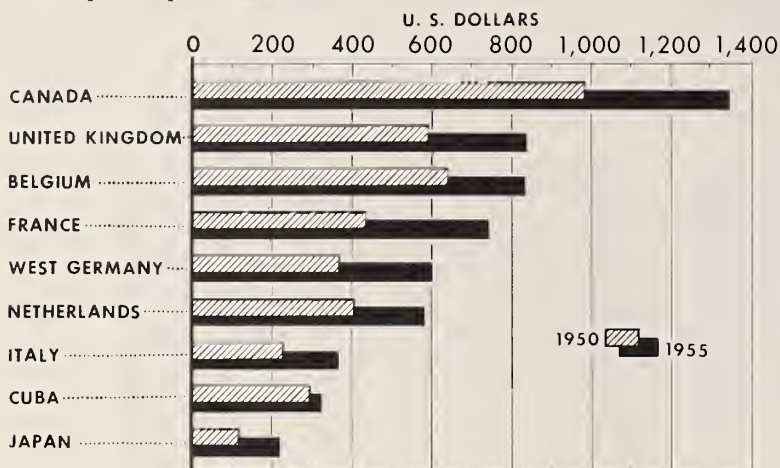
Agricultural imports from the U.S. by these 5 countries have followed the upward trend in their national income in recent years.

Principal customers: Index of national income and agricultural imports from the United States, 1949-56 (1949-50 = 100)

Country	National income								Agricultural imports							
	1949	1950	1951	1952	1953	1954	1955	1956	1949	1950	1951	1952	1953	1954	1955	1956
Canada.....	95.1	104.9	123.5	132.1	137.9	135.5	149.5	166.2	92.7	107.3	129.8	112.2	106.2	128.9	122.1	147.4
Japan.....	89.8	110.2	148.7	170.4	191.0	197.5	220.3	243.6	102.9	97.1	116.6	119.1	102.1	116.1	107.3	108.8
West Germany.....	93.8	106.2	130.0	144.5	155.2	166.8	191.4	209.3	132.6	67.4	68.8	52.5	41.2	49.9	45.5	68.8
Netherlands.....	95.0	105.0	113.6	120.1	129.4	143.8	159.7	170.5	98.6	101.4	118.8	120.1	101.0	187.2	183.0	205.7
United Kingdom.....	97.5	102.5	112.2	121.9	130.5	139.7	146.9	156.9	112.4	87.6	165.4	90.4	97.7	119.9	124.4	139.3



## Per-Capita Income Up in Major Export Markets



USDA

FAS-NEG. 1453

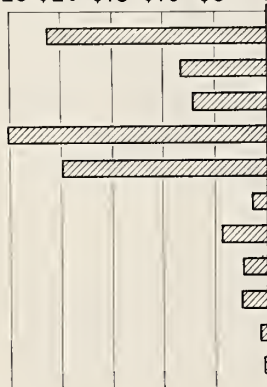
Per capita incomes have been rising in recent years in most countries in the world. This, with increasing world population and improved diets, is among the most important factors in achieving high international trade in farm products. There is good correlation (see charts)

between per capita income and volume of farm products imported from the U.S. Nine of the U.S. major markets are listed on the upper chart. A comparison with the ranking of the best U.S. customers in volume of trade (see page 19) indicates that high income is

## Per Capita Income and Agricultural Imports Related

PER CAPITA VALUE OF AGRIC.  
IMPORTS FROM U. S. IN 1956

\$25 \$20 \$15 \$10 \$5 0



PER CAPITA INCOME IN 1955

0 \$500 \$1,000 \$1,500



USDA

FAS-NEG. 1463

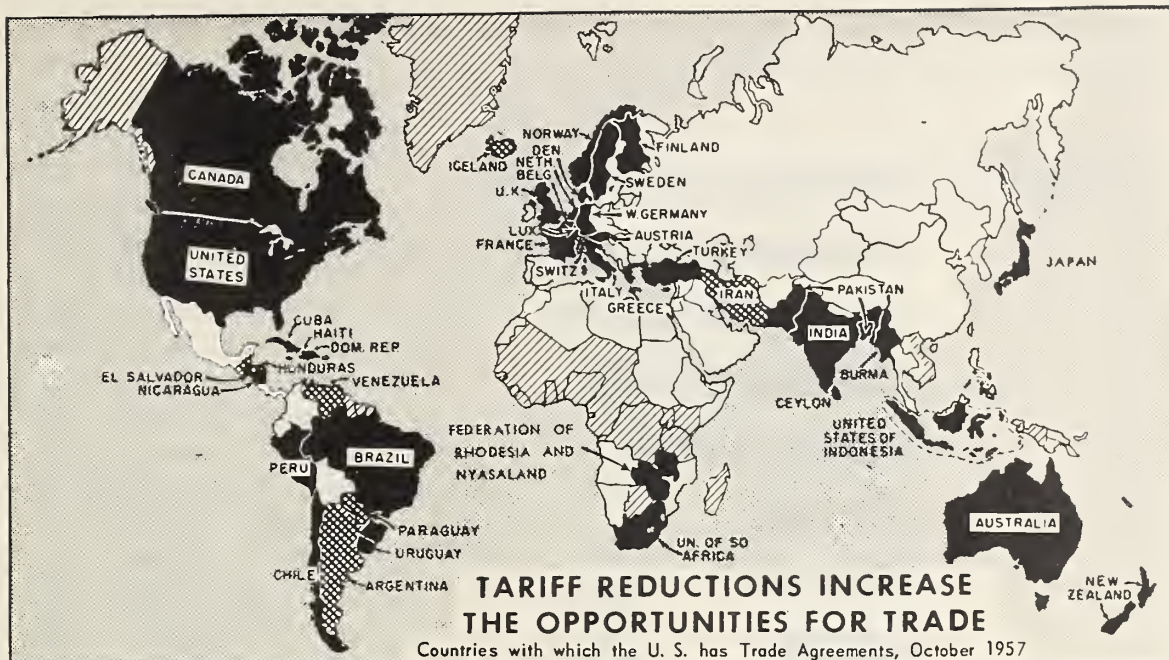
generally related to high imports.

This correlation is even more pronounced when imports are put on a per capita basis (lower chart).

It seems certain that incomes and world demand for farm products will continue to rise. Prospects are good for the U.S. to sell heavily in an enlarged world market. Many world agricultural nations are likely to import more agricultural products because their population is expanding faster than their rate of agricultural production.

Selected countries: Per capita income, 1955 and per capita value of U.S. agricultural imports, 1956

Country	Per capita income : 1955	Per capita value of U.S. income : agri. imports
	U.S. dollars	U.S. dollars
Canada	1,340	21.19
United Kingdom	835	8.24
West Germany	600	7.09
Netherlands	580	25.04
Cuba	320	19.92
Turkey	220	1.42
Japan	210	4.35
Mexico	200	2.25
Philippines	180	2.41
Brazil	135	.71
India	55	.23



	SIGNATORY OF THE GENERAL AGREEMENT ON TARIFFS AND TRADE	\$148.3 BIL. 76.6% OF WORLD TRADE
	BILATERAL TRADE AGREEMENT COUNTRY	\$ 9.1 BIL. 4.8% OF WORLD TRADE
	DEPENDENT TERRITORIES COVERED BY THE AGREEMENT	\$ 14.8 BIL. 7.7% OF WORLD TRADE

USDA

FAS-NEG. 1458

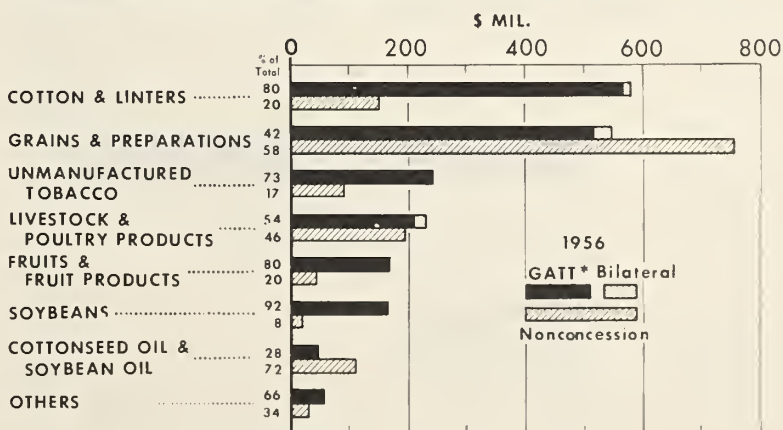
The United States has trade agreements with 41 countries; 33 are multilateral agreements with GATT members; the others are bilateral agree-

ments. Under GATT each member grants to all others the duty rates on agreed tariff items negotiated with any other country. Members agree to pro-

hibit or limit the use of other forms of trade barriers. Stable tariff levels in GATT countries have helped over-all flow of world trade.

Trade agreement concessions have been obtained by the U.S. on many farm products moving in world trade. In 1956 more than half of total U.S. agricultural exports moved under one or more trade agreement concessions. For cotton and linters, \$580 million, or 80 percent, was exported under a concession.

### GATT Concessions Important to Exports of Leading Farm Commodities <sup>Δ</sup>



Δ U. S. EXPORTS OF SELECTED COMMODITIES

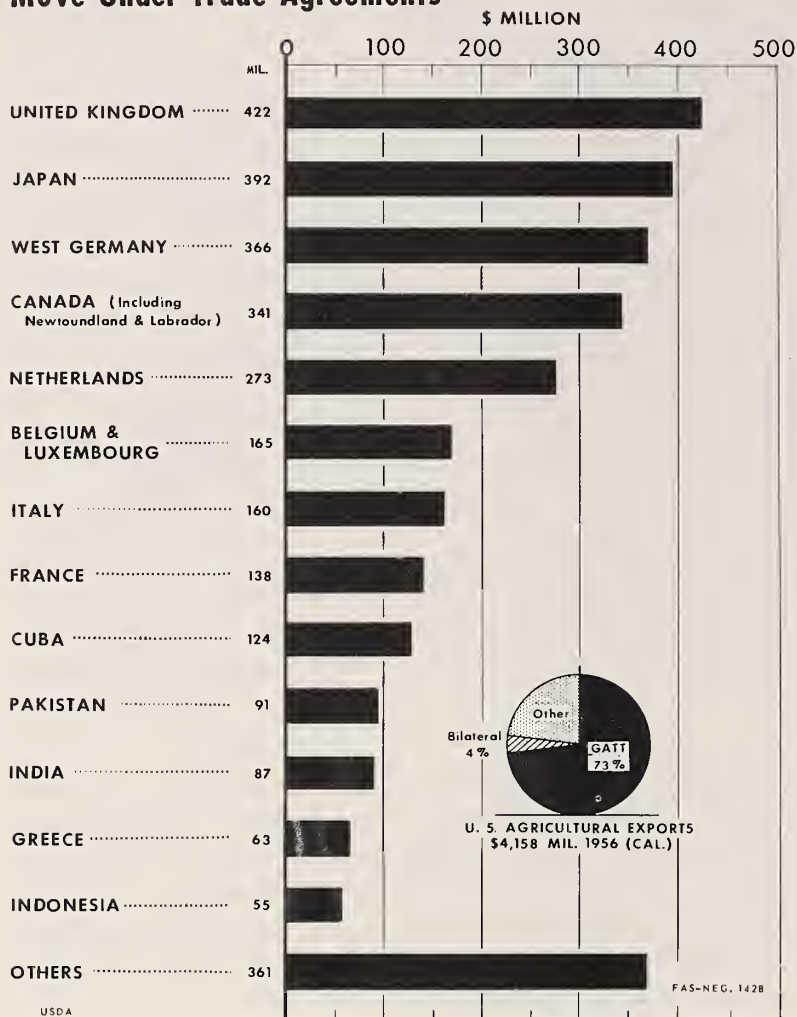
\* GENERAL AGREEMENT ON TARIFFS AND TRADE

USDA

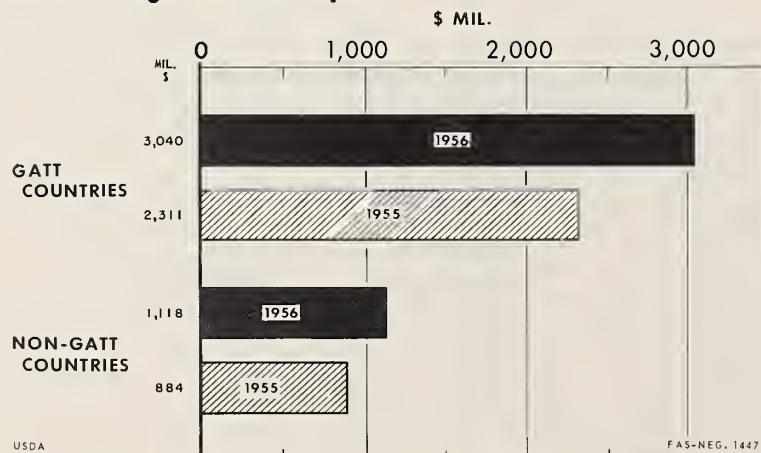
FAS-NEG. 1429



## Nearly 80% U.S. Farm Exports Move Under Trade Agreements



## GATT Countries Take \$3 Billion of U. S. Agricultural Exports



Nearly 80 percent of U.S. agricultural exports went to trade agreement countries in 1956, and two-thirds of such exports moved under concessions.

The principal instrument for improving trade relations is the General Agreement on Tariffs and Trade. The U.S. is one of 35 member countries.

GATT nations, in 1956, imported more than \$3 billion worth of U.S. farm products. Among GATT members are the major present and potential customers for U.S. farm products.

GATT countries have maintained certain trade restrictions for balance-of-payments reasons since the end of World War II, but during the past 2 years the U.S. has pressed in GATT consultations for relaxation with fair success.

With U.S. agricultural exports increasing 30 percent in 1956 over 1955, it is indicative that exports to GATT countries increased by 31.5 percent; those to non-GATT countries by only 26.4 percent.



U.S. farm products are being promoted extensively abroad with foreign currencies made available under Section 104(a) of Public Law 480.

In the 2-year period, July 1, 1955-June 30, 1957, 69 market development projects were initiated in 26 countries. These projects are designed to maintain or expand present markets or to develop new ones for U.S. farm commodities.

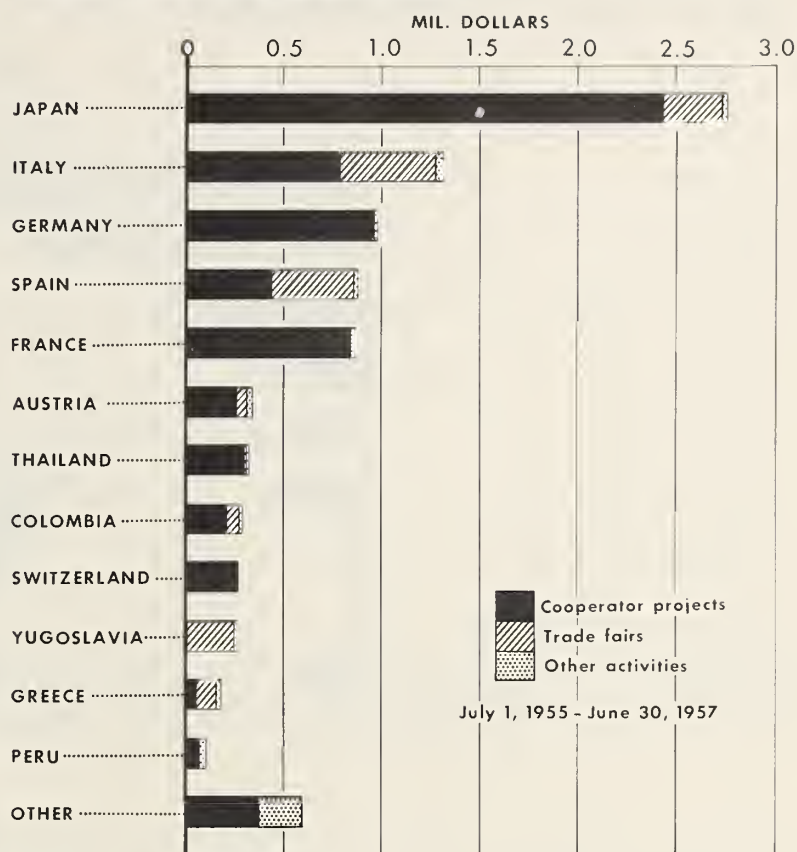
Most commodities are included: cotton, dairy products, fruits, grains, livestock and livestock products, poultry, seeds, soybeans, and tobacco.

Promotion activities include market surveys, nutrition studies, demonstrations, exchange of trade people, and specific commodity promotions.

An important activity is United States exhibitions of foods and other farm commodities at international trade fairs.

In the past 2 years, U.S. farm products were shown at 16 fairs in 11 countries. This activity directly supports the other types of foreign market development projects.

## Most Active Market Promotion Taking Place in Japan and Italy



USDA

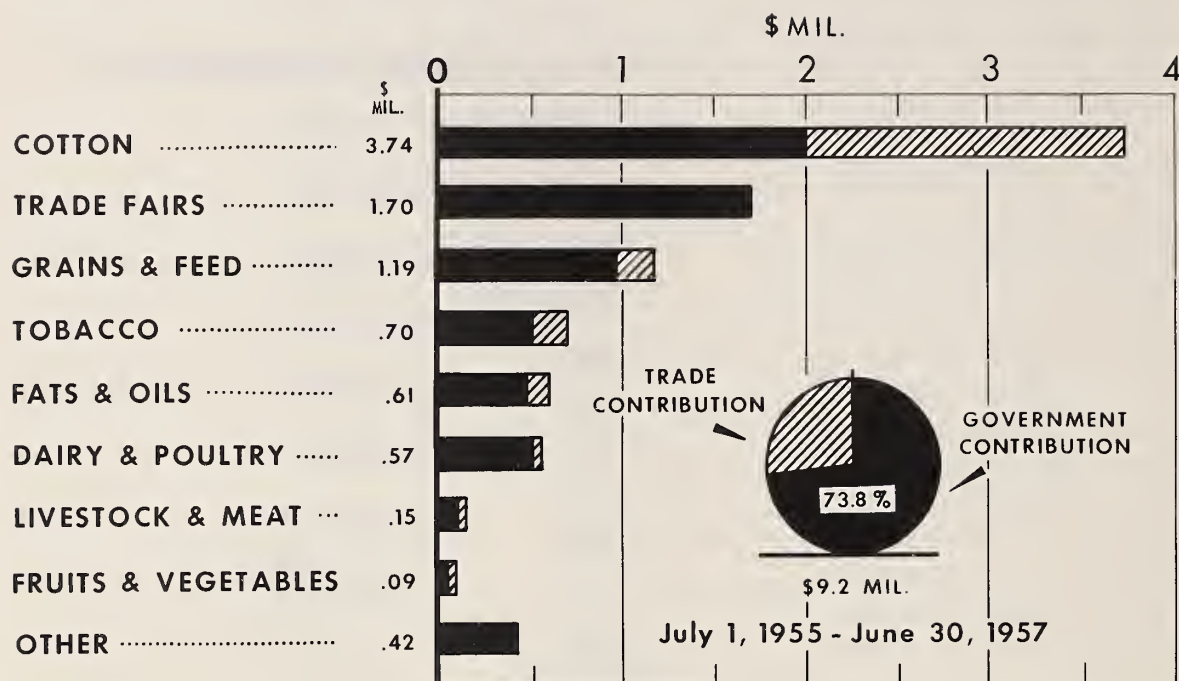
FAS-NEG. 1464

Section 104 (a) export market development by countries, July 1, 1955-June 30, 1957 1/

Country	Cooperator projects	Trade fairs	Other activities	Total
	1,000 dollars	1,000 dollars	1,000 dollars	1,000 dollars
Argentina.....	-	-	13	13
Austria.....	265	49	30	344
Belgium.....	102	-	-	102
Brazil.....	24	-	41	65
Burma.....	14	-	1	15
Chile.....	41	-	7	48
Colombia.....	219	66	11	296
Ecuador.....	18	-	1	19
Finland.....	12	-	10	22
France.....	851	-	20	871
Germany.....	965	-	10	975
Greece.....	68	103	11	182
Indonesia.....	19	-	5	24
Iran.....	-	-	5	5
Israel.....	-	-	3	3
Italy.....	784	491	33	1,308
Japan.....	2,426	305	25	2,756
Korea.....	28	-	5	33
Netherlands.....	43	-	-	43
Pakistan.....	59	-	15	74
Peru.....	74	-	31	105
Spain.....	435	433	12	880
Switzerland.....	278	-	-	278
Thailand.....	307	5	6	318
Turkey.....	11	-	5	16
Yugoslavia.....	1	257	5	263
Other.....	-	-	117	117
Total.....	7,044	1,709	422	9,175

1/ Government financing in foreign currencies in dollar value, except cooperator projects which include trade contributions in dollars.

# U. S. Government, Private Trade Share Export Promotion Cost



USDA

FAS-NEG. 1460

Market-development projects to promote the sale of U.S. farm products abroad are carried out by trade groups under cooperative agreements with the Foreign Agricultural Service.

Participation by foreign trade groups is emphasized. All participants share in the cost.

A project may be carried out by a trade group, research organization, a land-grant college, or similar organization, or by the USDA itself.

Factors in developing a project include: its potential in increasing exports of U.S. farm products; its long-range effect on total U.S. agricultural exports; and the importance of the commodity or commodities to U.S. agriculture.

Cooperating groups often furnish specialists who, working with FAS and its agricultural attaches, conduct and supervise actual projects abroad.

The scope of foreign market development work is being expanded in the current year.

Section 104 (a) export market development by commodity groups, July 1, 1955-June 30, 1957

Commodity group	Government contribution	Trade contribution	Total value
	1,000 dollars	1,000 dollars	1,000 dollars
Livestock and meat.....	119	30	149
Fats and oils.....	481	126	607
Fruits and vegetables.....	50	41	91
Grain and feed.....	972	216	1,188
Cotton.....	2,007	1,731	3,738
Dairy and poultry.....	507	63	570
Tobacco.....	509	192	701
Trade fairs.....	1,709	-	1,709
Other.....	422	-	422
Total.....	6,776	2,399	9,175

1/Foreign currencies expressed in dollar value.

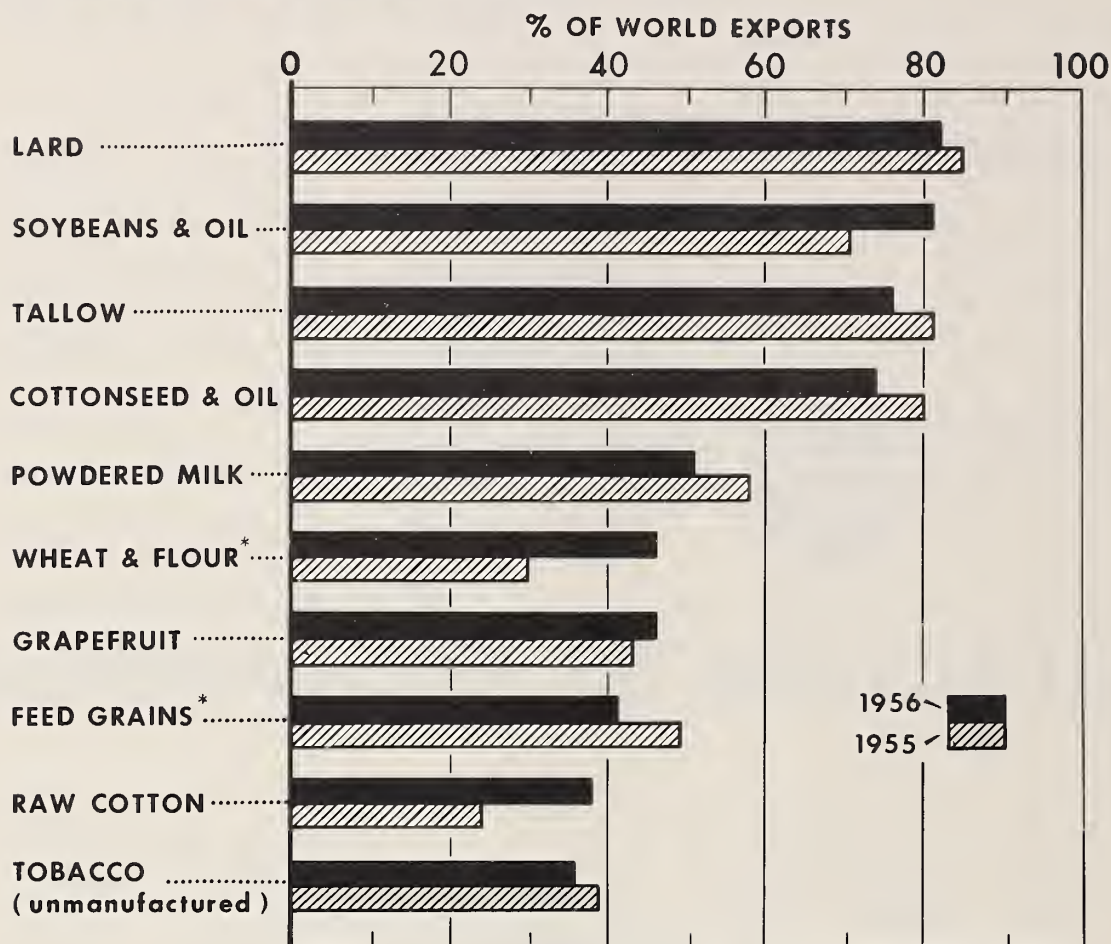
## Section IV

# SITUATION BY COMMODITIES





# U. S. Big World Supplier of Many Farm Products 1955-1956



\* MARKETING YEAR - ALL OTHERS CALENDAR YEAR

USDA

FAS-NEG. 1424

With U.S. agricultural exports at record levels, this country is a big world supplier of many farm products. Currently it is supplying three-fourths or more of the world's exports of lard, tallow, soybeans and oil, and cottonseed and oil; and more than one-third of the world's exports of powdered milk, wheat,

U. S. agricultural exports as  
percent of world exports  
1955 and 1956 <sup>1/</sup>

Commodity	1955	1956
	Percent	
Lard.....	85	82
Soybeans and oil.....	71	81
Tallow.....	81	76
Cottonseed and oil.....	80	74
Powdered milk.....	58	51
Wheat and flour.....	30	46
Grapefruit.....	43	46
Feed grains.....	49	41
Raw cotton.....	24	38
Tobacco.....	39	36

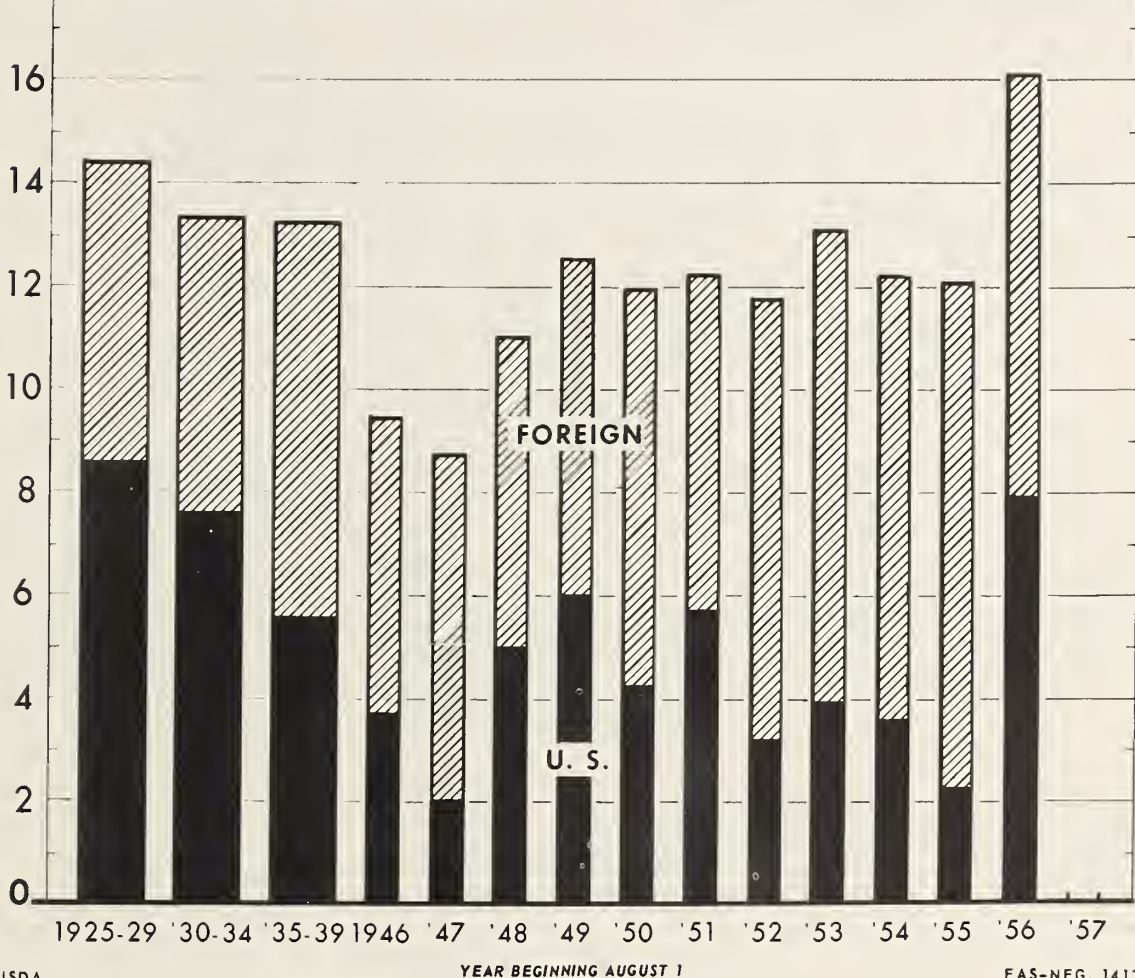
<sup>1/</sup> Marketing year for wheat and feed grains; calendar year for other items.

grapefruit, feed grains, cotton, tobacco, and flaxseed and linseed

oil. Other sizable export products are dry edible beans, condensed and evaporated milk, oranges, rice, and cheese. Greatest increase in exports in the 1956-57 marketing year were in wheat, cotton, and soybeans, reflecting high demand abroad and competitive export prices.

# U. S. Cotton Exports Largest in 23 Years

MIL. BALES (500 LB. GROSS WEIGHT)



USDA

FAS-NEG. 1413

U.S. cotton exports in 1956-57, at 7.9 million bales, were the largest since 1933-34, and represented almost half the world trade in cotton.

Cotton was highest in value of all U.S. agricultural exports. Lint cotton accounted for 24 percent of exports, and was responsible for 61 percent of the

Cotton: United States and world exports, year beginning Aug. 1, averages 1925-39									
annual 1946-56									
Year.	Total exports			Year.	Total exports				
	United States		World		United States		World		
Average:	Million bales 1/	Percent	Million bales 1/	Million bales 1/	Percent	Million bales 1/			
1925-29..	8.6	60	14.4	1950....	4.3	36	11.9		
1930-34..	7.6	57	13.3	1951....	5.7	47	12.2		
1935-39..	5.6	42	13.2	1952....	3.2	27	11.8		
Annual:				1953....	3.9	30	13.1		
1946.....	3.7	39	9.4	1954....	3.6	30	12.2		
1947.....	2.0	23	8.7	1955....	2.3	19	12.1		
1948.....	5.0	45	11.0	1956 2/.	7.9	49	16.1		
1949.....	6.0	48	12.6						

1/ 500 pounds gross weight.

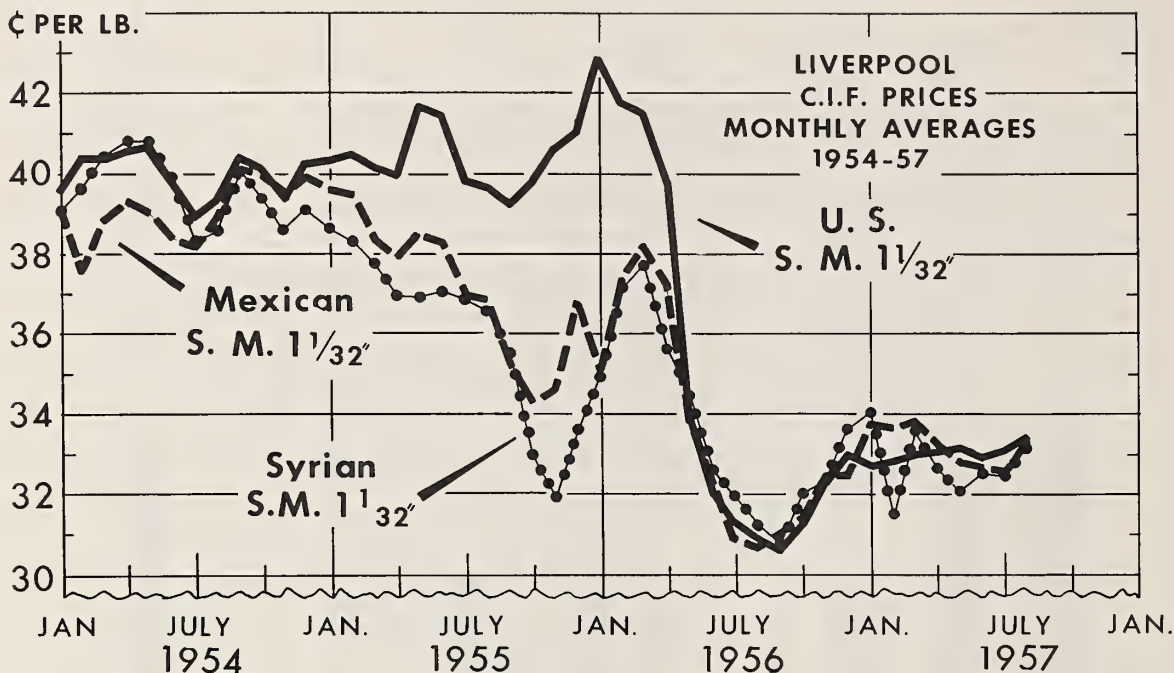
2/ Preliminary.

gain in exports over the previous year. High world trade in cotton in 1956-57 (16.1 million bales) shows stable prices and sup-

plies, restoration of stocks in importing countries to more nearly normal levels, and steadily rising foreign consumption.



# U. S. Cotton Export Program Stabilizes World Prices



USDA

FAS-NEG. 1415

The U.S. cotton export program has stabilized prices and restored market confidence. Early in 1955, foreign prices began dropping from high 1954 levels as U.S. carryover built up, disposal programs became imminent, and high U.S. support prices seemed at an end.

Late in 1955, foreign cotton undersold U.S. cotton by 8¢ a pound.

When sales of U.S. short staple cotton began in January, foreign prices recovered, but declined again as CCC sales of all upland qualities began in April. By late September (1956) 5 million bales of U.S. cotton had been sold.

Prices then turned upward, and by early 1957 most foreign surpluses were gone, prices were above those in effect before the start of U.S. export programs, and some 1957-crop foreign cotton sold several months before it was produced.

C.i.f. cotton prices, Liverpool, selected growths  
monthly averages, 1954-57

Month	Liverpool S. M. 1-1/32"		
	U. S. \$ per lb.	Mexican \$ per lb.	Syrian \$ per lb.
1954			
January	39.59	39.16	39.10
February	40.38	37.60	39.66
March	40.12	38.86	40.85
April	40.56	39.30	40.82
May	40.69	39.04	40.81
June	39.81	38.40	39.92
July	38.93	38.18	38.27
August	39.36	38.90	38.27
September	40.39	40.15	40.12
October	40.15	39.97	39.14
November	39.43	39.48	38.64
December	40.22	39.91	39.12
1955			
January	40.31	39.63	38.66
February	40.43	39.50	38.27
March	40.16	38.38	37.80
April	39.99	37.95	36.99
May	41.65	38.47	36.96
June	41.45	38.27	37.13
July	39.85	36.98	36.89
August	39.76	36.83	36.62
September	39.25	35.27	35.53
October	39.81	36.77	33.08
November	40.59	36.62	31.94
December	41.02	36.78	33.64
1956			
January	42.81	35.10	34.99
February	41.77	37.44	37.15
March	41.54	38.18	37.74
April	39.76	37.23	35.66
May	41.10	37.81	34.51
June	42.01	38.18	32.62
July	41.30	36.94	31.96
August	40.95	36.73	31.25
September	40.60	31.02	30.80
October	41.33	32.45	32.02
November	42.32	32.46	32.32
December	43.07	32.49	33.65
1957			
January	42.72	33.76	34.06
February	42.85	33.67	31.55
March	43.02	33.81	33.60
April	43.06	33.20	32.69
May	43.11	32.82	32.10
June	42.96	32.67	32.54
July	43.11	32.60	32.49
August	43.15	33.34	33.16

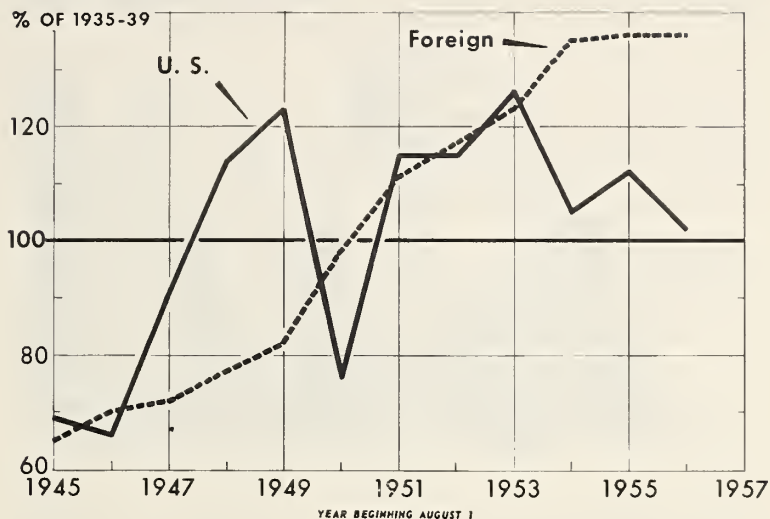


Cotton: Index of production,  
United States and foreign,  
years beginning Aug. 1, 1945-56

(1935-39 = 100)		
Year	United States	Foreign
1945.....	69	65
1946.....	66	70
1947.....	91	72
1948.....	114	77
1949.....	123	82
1950.....	76	98
1951.....	115	111
1952.....	115	117
1953.....	126	123
1954.....	105	135
1955.....	112	136
1956.....	102	136

Foreign cotton production has stabilized in the past 3 years at about 25 million bales, following big earlier rises under protection of high U.S. support prices. Production in 1956-57 was lower in Mexico, Brazil, Argentina, and

## Foreign Cotton Production Is Leveling Off



USDA

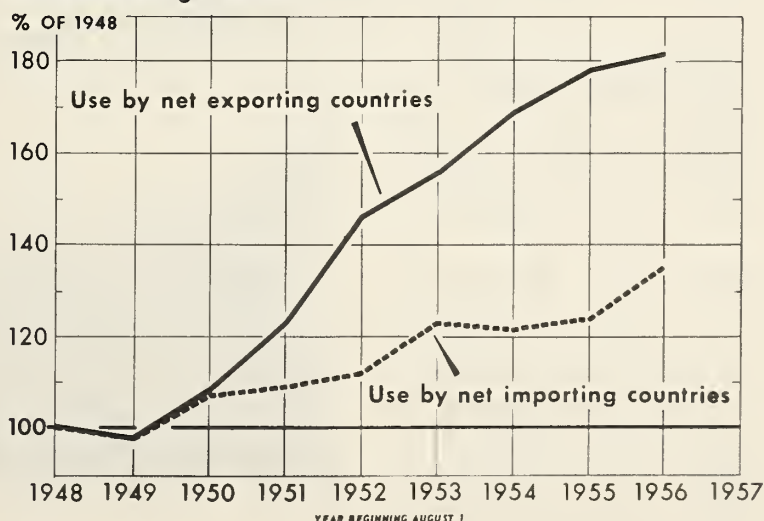
FAS-NEG. 1414

China, mostly from natural causes. Production was higher in the USSR, India, Sudan, and Central America, due to their government programs. U.S. production continues to decline under acreage controls.

Foreign cotton consumption, now at record high levels, has increased each year since 1949. The increase in 1956, largest in importing countries, reflects stability in supplies and prices, and improved competitive position with man-

made fibers. It also reflects traditional preferences for American cotton, which is shown by tests to be superior to most competitive foreign growths.

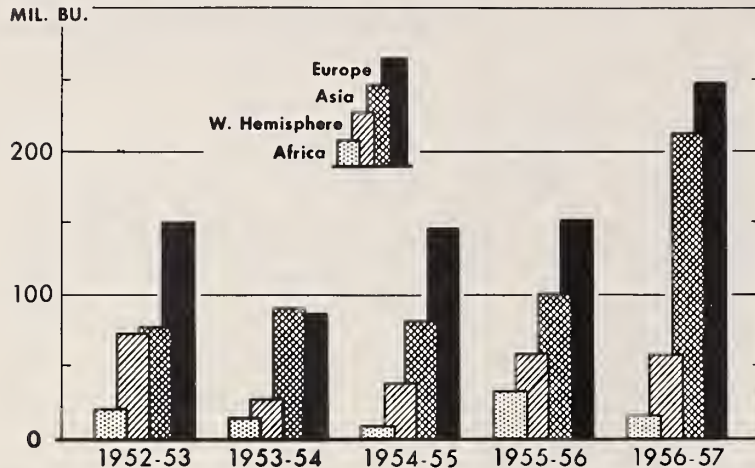
## Foreign Cotton Consumption at Record High Level



USDA

FAS-NEG. 1412

## U. S. Wheat and Flour Exports Increase Greatly to Europe and Asia



USDA

FAS-NEG. 1438

U.S. exports of wheat and flour in fiscal year 1957 set an all-time record of 546 million bushels (grain equivalent). This was

the largest quantity ever exported by any country in one year. U.S. previous export record was 504 million bu. in fiscal year 1949.

Wheat and flour: Destinations of U. S. exports, by area

Destination	1952-53	1953-54	1954-55	1955-56	1956-57
Europe	150	87	146	154	245
Asia	78	91	82	101	223
Western Hemisphere	74	27	38	58	63
Africa	21	14	9	32	15
Others	1	1	-	-	-
<b>Total</b>	<b>324</b>	<b>220</b>	<b>275</b>	<b>345</b>	<b>546</b>

Most of U.S. wheat exports went to W. Europe, and were up 59 percent, compared with those of fiscal year 1956. Big factor was the poor crop in 1956 in most European countries. Asia was the No. 2 export outlet; western hemisphere countries third.

The U.S. furnished 44 percent of world wheat exports in fiscal year 1957, compared with 33 percent the previous year. The 4 countries referred to as the "Big IV" wheat export-

ers (U.S., Canada, Argentina, Australia) supplied 85 percent of fiscal year 1957 exports, compared with 82 percent the previous

year. Other countries which export wheat only in good crop years include France, Uruguay, Turkey, Sweden, Morocco, and Algeria.

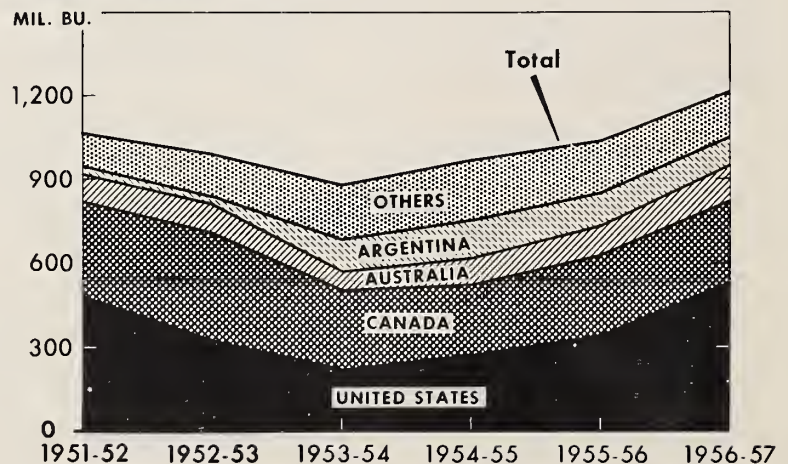
## U. S. Supplies Nearly Half World's Wheat Exports

Wheat and flour: Exports by indicated countries and all others, marketing year beginning July 1, 1951-57

Period (July-June)	U.S.A.	Canada	Australia
<b>Million bushels</b>			
1951.....	480	342	99
1952.....	324	385	100
1953.....	220	285	71
1954.....	275	252	93
1955.....	345	289	102
1956.....	546	282	128

	Argentina	Others	World total
<b>Million bushels</b>			
1951.....	30	115	1,066
1952.....	29	149	987
1953.....	110	193	879
1954.....	132	219	971
1955.....	115	189	1,040
1956.....	98	186	1,240



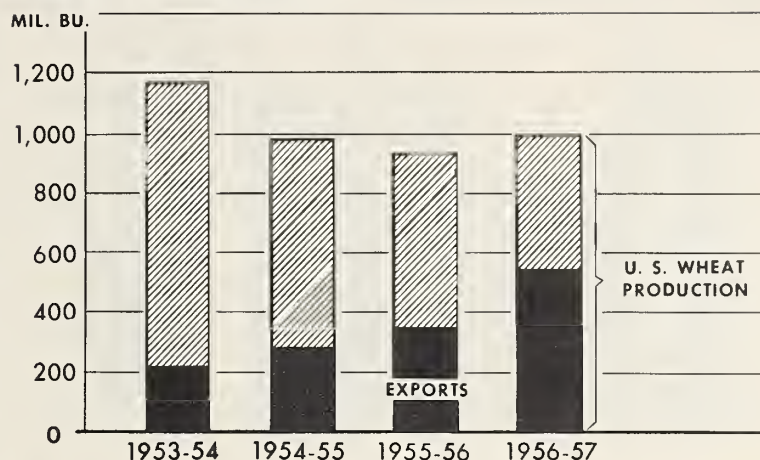
USDA

FAS-NEG. 1437



U.S. wheat production has been going down in recent years because of measures taken to restrict acreage. At the same time, other measures have been taken to increase exports. In fiscal year 1957 exports were equivalent to 54 percent of the year's production. This compares to the fiscal year 1954 figure of only 20 percent. Wheat exports may not continue to hold this high percentage.

## Exports Equivalent to 54 % 1956-57 U. S. Wheat Crop



USDA

FAS-NEG. 1427

Wheat: U.S. production and exports, with comparisons, year beginning July 1, 1953-56

	1953-54	1954-55	1955-56	1956-57
	Million bu.	Million bu.	Million bu.	Million bu.
Production.....	1,169	984	935	997
Exports.....	217	274	346	546
Exports as percent of production.....	19	28	37	54

U. S. exports of wheat and flour in fiscal year 1957 were more than 2-1/2 times those of fiscal year 1954,

the low post-World War II year.

Assisted largely by sales under Government programs, pri-

marily Title 1 of Public Law 480, fiscal year 1957 wheat exports set a new record high of 546 million bushels. Cash sales were nearly double those of 1954, although they decreased in proportion to total exports.

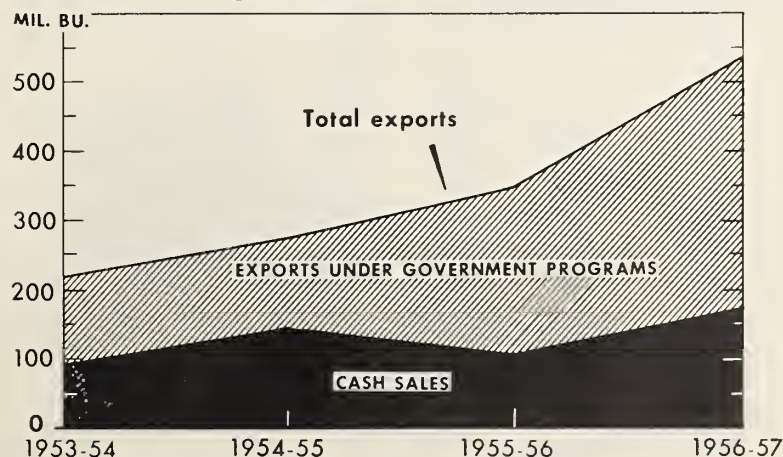
P. L. 480, and other such temporary programs have a long-range purpose of building foreign dollar markets for U.S. agricultural commodities.

Exports of wheat are expected to continue at a high level in fiscal year 1958, but probably not as high as in fiscal year 1957.

Wheat: U.S. exports, export under govt. programs, and cash sales, year beginning July 1, 1953-56

	1953-54	1954-55	1955-56	1956-57
	Million bu.	Million bu.	Million bu.	Million bu.
Total U. S. exports.....	217	274	346	546
Exports under government programs.....	126	130	240	361
Total U. S. cash sales.....	91	144	106	185

## More Wheat Exported Under Government Programs, Cash Sales

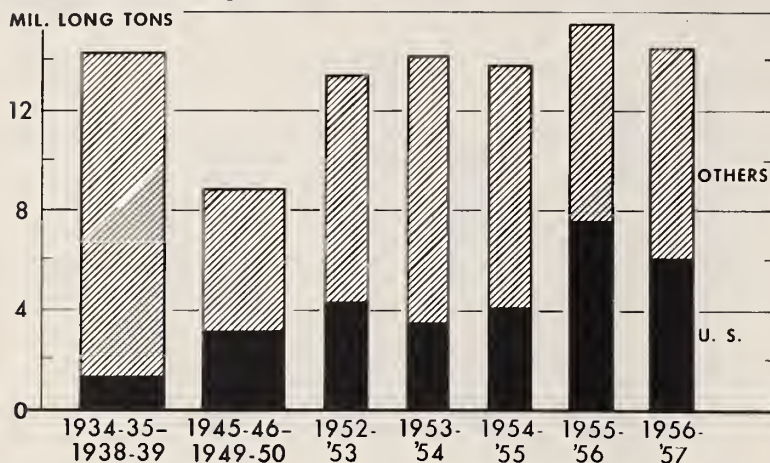


USDA

FAS-NEG. 1426



## U. S. Share of World's Coarse Grain Exports Down



USDA

FAS-NEG. 1439

Coarse grains: United States and world exports, marketing year beginning July, specified 5-year average 1934-50, annual 1952-57

Period (July-June)	United States	World
	1,000 long tons	1,000 long tons
Average:		
1934-35/1938-39.....	1,223	14,278
1945-46/1949-50.....	3,139	8,727
Annual:		
1952-53.....	4,288	13,373
1953-54.....	3,433	14,178
1954-55.....	4,070	13,753
1955-56.....	7,552	15,465
1956-57.....	6,053	14,500

1/ Preliminary estimate.

Countries of West Europe are the best export market for U.S. coarse grains (corn, oats, barley, and grain sorghums) because of the demand for livestock feed and competition for use of the land for other crops there. Asia is the next best export market, shipments being primarily barley to Japan and Korea for human food; western hemisphere countries are the next best market.

World exports of coarse grains (corn, oats, barley, and grain sorghums) were down from 15.5 million long tons in 1955-56 to 14.5 million long tons in 1956-57.

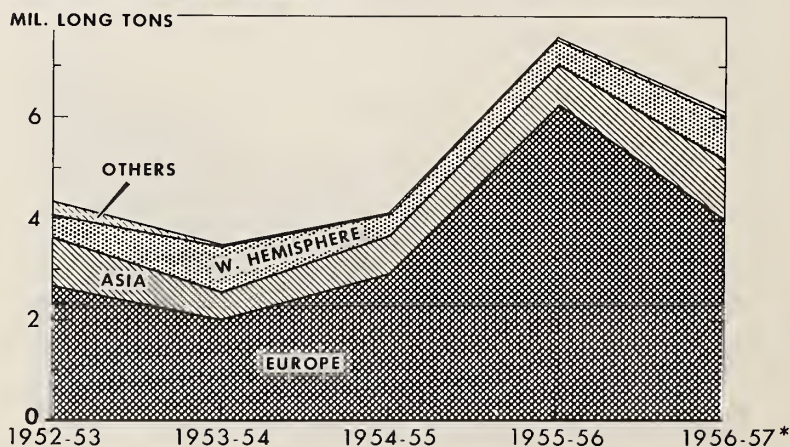
The U.S. share in 1956-57 was 41.7 percent, compared with 48.8 percent a year earlier.

The reduction in world exports during 1956-57 was due to several factors, including big supplies of European non-millable wheat, higher production of European feed grains, and an unprecedented exportable surplus of barley in France.

Coarse grain: Destinations of U.S. exports, by area (1,000 long tons)

Destination	1952-53	1953-54	1954-55	1955-56	1956-57
Europe.....	2,640	2,006	2,902	6,225	4,006
Asia.....	946	533	742	814	1,154
Western Hemisphere.....	436	880	414	484	843
Others.....	266	14	12	29	50
Total.....	4,288	3,433	4,070	7,552	6,053

## W. Europe Biggest Export Market for U. S. Coarse Grains



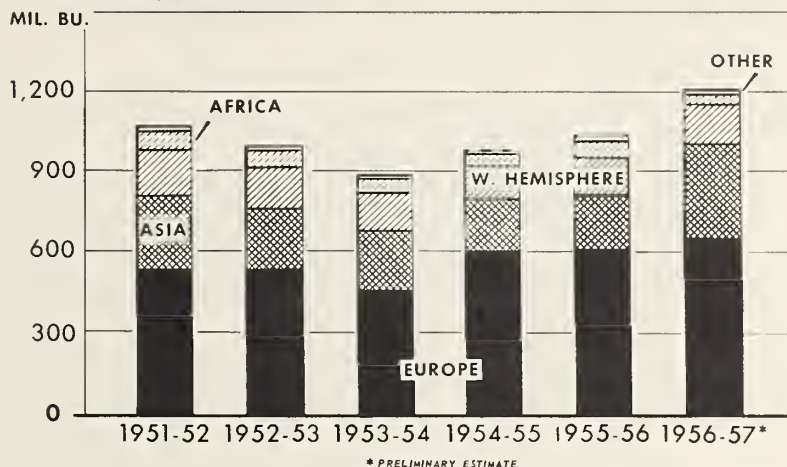
\* PRELIMINARY ESTIMATE

USDA

FAS-NEG. 1465

European and Asiatic markets took 83 percent of the record world wheat and flour exports in fiscal year 1957: 55 percent to Europe; 28 percent to Asia. These heavily populated areas, with land at a premium and wheat from other areas relatively cheap, are big outlets for world wheat production. Exports in fiscal year 1957 went up due to reduced production and poor quality of the crop and U.S. sales under special programs.

## 83% of World's Wheat & Flour Exports Go to Europe & Asia



USDA

FAS-NEG. 1436

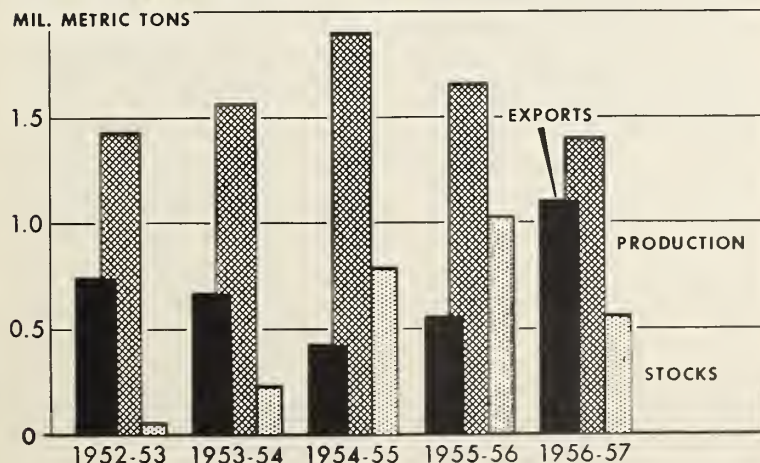
Wheat: World exports by area of destination, year beginning July 1, 1951-56

Destination	1951	1952	1953	1954	1955	1956 1/
	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.
Europe.....	531	531	459	600	606	680
Asia.....	273	228	221	193	208	350
Western Hemisphere.....	171	154	140	133	147	155
Africa.....	74	63	49	35	59	35
Others.....	17	11	10	10	20	20
Total.....	1,066	987	879	971	1,040	1,240

1/ Preliminary.

U.S. rice exports in 1956-57 (Aug.-July) were at a record high and helped to reduce heavy surpluses to a more manageable level.

## U. S. Rice Exports Rise; Production and Stocks Decline



USDA

FAS-NEG. 1440

U. S. Government measures to reduce rice surpluses include allotments to reduce acreage and legislation (Public Law 480) to move rice into for-

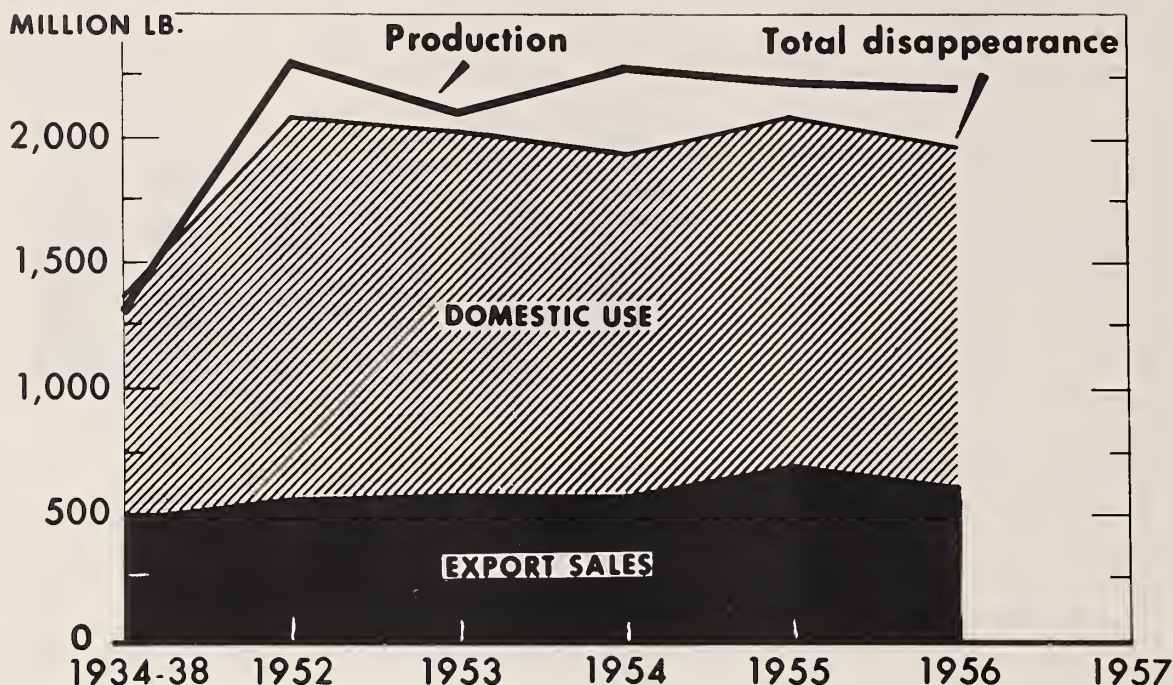
oreign markets at world prices. P.L. 480 was the more important reason for big U.S. rice exports; about three-fourths of the record rice exports in 1956-57 were under P.L. 480 sales for foreign currencies and Section 416 donations. Rice exports under government programs went to 8 countries in 1956-57, commercial exports principally to 6 countries.

Rice, milled: U.S. exports, production and stocks, year beginning August 1, 1952-56

Year	Exports	Production	Ending stock
	1,000	1,000	1,000
	mil.tons	mil.tons	mil.tons
1952....	741	1,423	46
1953....	669	1,560	222
1954....	424	1,894	787
1955....	548	1,650	1,020
1956....	1,091	1,399	560



## Exports Account for Nearly One-Third Use of U. S. Tobacco



USDA

FAS-NEG. 1416

Nearly one-third of all U.S. tobacco sold is exported as leaf or as tobacco products. Export sales give about 30 cents of each dollar U.S. farmers receive for tobacco.

The foreign market is now even more important for tobacco since U.S. manufacturers use less leaf to make a given quantity of tobacco products. The trend to filter tip cigarettes, most of which require less tobacco per cigarette, and with greater use of processed tobacco sheet

and stems, has reduced leaf requirements at home.

Flue-cured accounts for 80 to 85 percent of U.S. tobacco exports. Shipments averaged 495 million lbs. and accounted for 36 percent of production of this type in the past five years. Burley exports, amounting to about 30 million pounds annually, are 3 times the prewar average, but take only 6 percent of U.S. burley production.

U.S. production and exports of fire-cured leaf are declining. How-

Tobacco: U.S. production and disappearance, marketing year, average 1934-38, annual 1952-56

(Farm sales weight)

Year	Pro-	Disappearance	
	duction	Total	Export 1/
Average:	Mil. lb.	Mil. lb.	Mil. lb.
1934-38.....	1,322.5	1,356.4	490.4
Annual:			
1952.....	2,290.1	2,083.4	559.3
1953.....	2,093.2	2,027.8	567.1
1954.....	2,277.5	1,958.4	564.5
1955.....	2,222.7	2,087.3	698.2
1956.....	2,204.7	1,975.0	604.8

ever foreign sales account for about 40 percent of U.S. production. Exports are now taking about 25 percent of U.S. production of Maryland type leaf.

Exports of U.S. cigar wrapper, up sharply, now take about one-third of U.S. wrapper production.



Tobacco, unmanufactured: U.S. exports by source of payment, year beginning July 1 average 1935-39, annual 1949-56

Year	U.S. : dollar sales	Foreign : grants and program	Foreign : current aid : sales	Total : dol.
Average: 1935-39 <sup>2</sup>	128	-	-	128
Annual:				
1949....	86	149	-	235
1950....	142	132	-	274
1951....	271	56	-	327
1952....	265	20	-	285
1953....	274	-	27	301
1954....	291	-	(3/1)15	306
1955....	323	-	(4/1)57	380
1956 <sup>5</sup> ...	306	-	(6/1)34	340

1/Sales for foreign currency under Section 550 of the Mutual Security Act, Title I of P.L. 480 and Section 402, P.L. 665.

2/Calendar year.

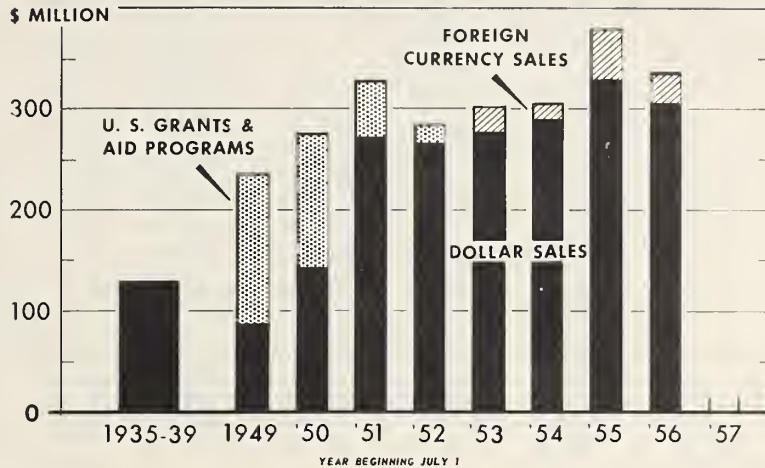
3/Includes about \$4.0 million under Title I, P.L. 480.

4/Includes about \$55.7 million under Title I, P.L. 480.

5/Preliminary.

6/Includes about 33.4 million under Title I, P. L. 480.

## Tobacco Export Sales for Dollars Continue High



USDA

FAS-NEG. 1417

Although foreign buyers continue to pay higher prices for U.S. quality tobacco, lower prices of competing

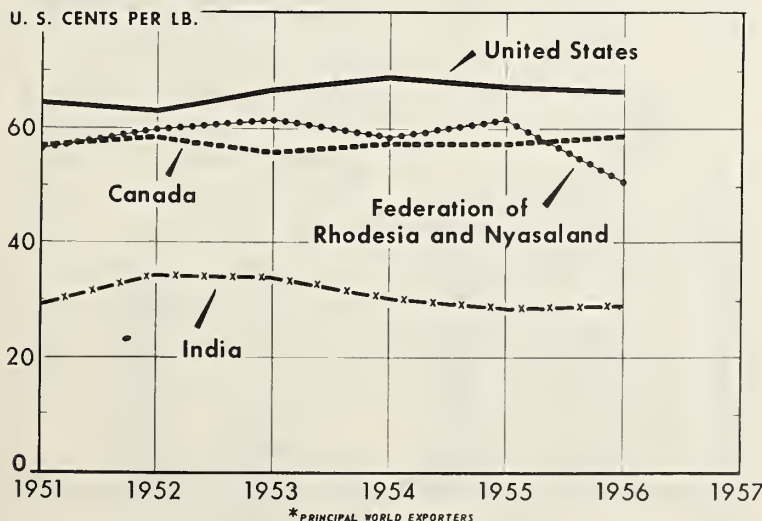
tobacco are hurting U.S. export sales. However, in many countries, where quality products are de-

manded, high U.S. prices are secondary. As foreign growers are producing larger supplies of improved leaf, it becomes more essential that the U.S. tobacco farmer produce leaf of the traditional high quality.

Tobacco. Average export prices for flue-cured, United States and major competitors, calendar year, 1951-56

Country	1951	1952	1953	1954	1955	1956
	U.S. cents per pound	U.S. cents per pound	U.S. cents per pound	U.S. cents per pound	U.S. cents per pound	U.S. cents per pound
United States .....	64.5	63.1	66.8	68.9	67.3	66.6
Canada .....	56.8	58.3	55.8	57.3	57.3	58.6
Fed. of Rhodesia .....						
and Nyasaland ..	56.5	59.8	61.3	58.3	61.4	50.6
India .....	29.0	34.3	33.9	30.2	28.6	29.0

## U. S. Flue-Cured Tobacco Tops World Prices \*



\* PRINCIPAL WORLD EXPORTERS

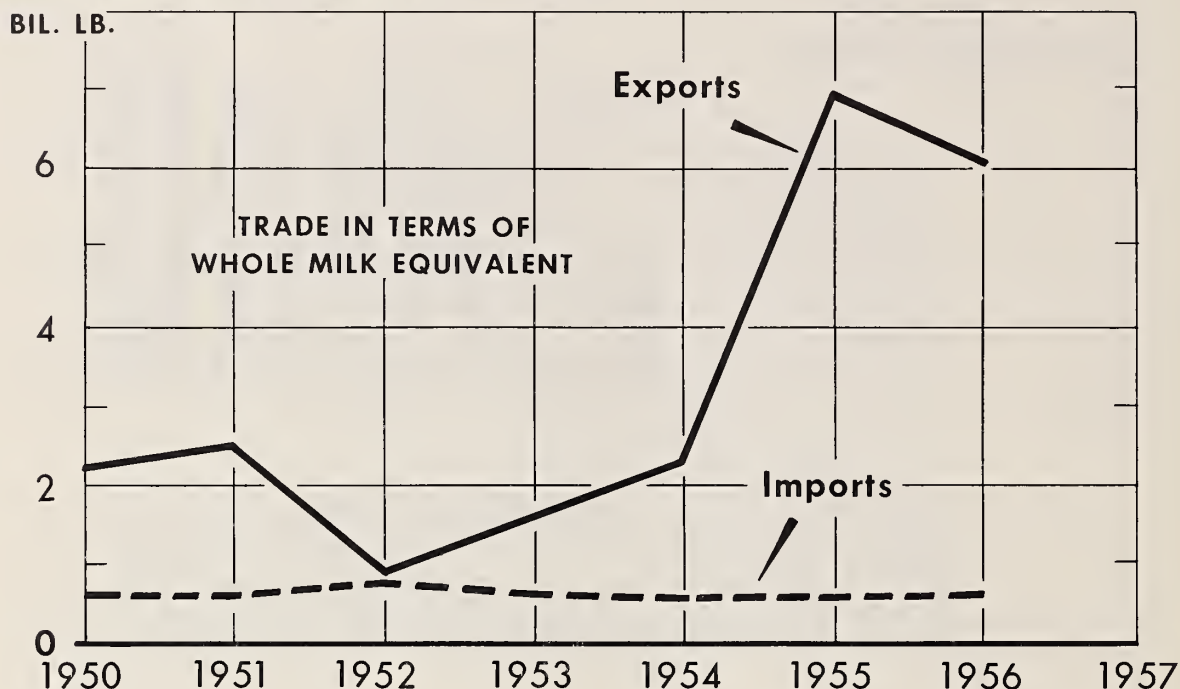
USDA

FAS-NEG. 1418

Ninety percent of U.S. tobacco exports in fiscal year 1957 (total of \$340 million) were sold for dollars, which was the second highest "dollar sales" year on record.

The foreign currency sales program (\$34 million in fiscal year 1957), however, served markets which otherwise might have taken little or no U.S. tobacco and helped the U.S. retain such markets.

# U. S. Dairy Exports High Despite Small Decline



USDA

FAS-NEG. 1433

Exports of U.S. dairy products in 1956, although much higher than in the past several years, were 900 million pounds less than the 6.9 million pounds of dairy products exported in 1955.

Butter exports declined 47 million pounds, but butter exported under commercial sales increased 18 million pounds.

Cheese exports in 1956 were up 26 million pounds. Cheese exported under government programs (largely donations) was about

Whole milk equivalent of United States trade in milk, cream and dairy products, 1950-56 (Includes shipments to territories and possessions)

Year	Exports	Imports
	Million pounds	Million pounds
1950....	2,209	548
1951....	2,477	579
1952....	905	787
1953....	1,622	588
1954....	2,289	502
1955....	6,965	520
1956 1/2..	6,087	530

1/ Preliminary.

the same as in 1955, but commercial sales increased 25 million pounds.

Exports of U.S. canned milk increased 47 million pounds in 1956 over those in 1955.

The milk equivalent of dairy products in 1956

represented 4.8 percent of the quantity of milk produced in the U. S. compared with 5.4 percent in 1955.

Imports of dairy products into the U. S. in 1956 (equivalent to 530 million pounds of milk) were slightly greater than in 1955, largely because imports of cheese were somewhat greater.

The milk equivalent of imports has shown little change in the past 7 years. In 1956, it represented only 0.4 percent of domestic milk production.

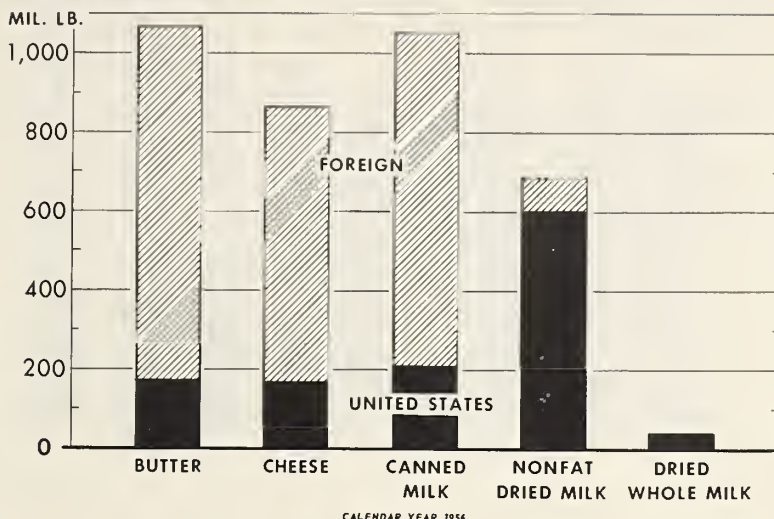
Trade in principal manufactured dairy products, U. S. and world, calendar year 1956 1/

Commodity:	U. S. : exports:	World : exports:	Percentage, U. S. to world
	Million pounds	Million pounds	Percent
Butter.....	179.0 :	1,064 :	16.8
Cheese.....	173.6 :	865 :	20.1
Canned milk.....	210 :	1,052 :	20.0
Dry whole milk.....	40.5 :	N.A. :	----
Nonfat dry milk.....	600.5 :	685 :	87.7

1/ Estimated.

The U. S. share of world dairy trade varies with actions taken under Government programs for acquiring and disposing of dairy products under price support programs. The bulk of foreign shipments of butter,

## U. S. Biggest Exporter of Nonfat Dried Milk



JSDA

FAS-NEG. 1430

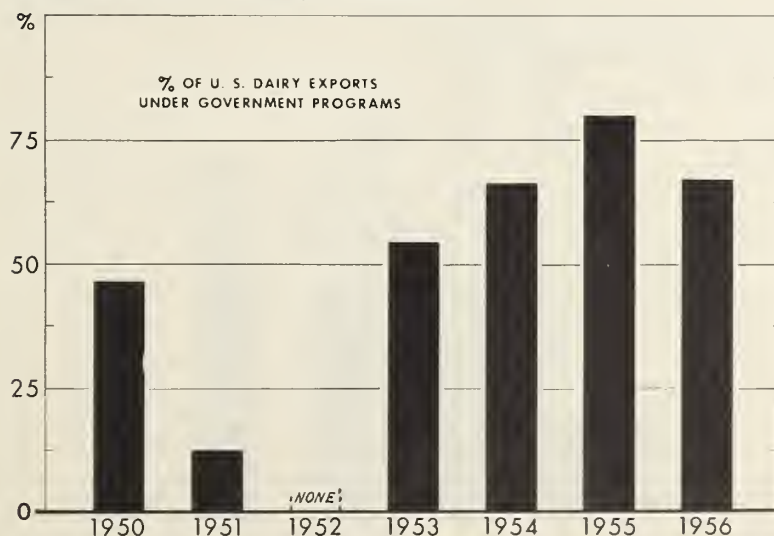
cheddar cheese, and nonfat dry milk are from CCC stocks and

include sales at nominal prices and distribution to needy people.

Dairy products: U.S. milk production and dairy-product exports, in milk equivalent, 1950-56

Year:	Milk production	Milk equivalent of total exports	Milk equivalent of Government shipments	Milk equivalent of commercial exports	Percent Government shipments of total exports
	Mil. pounds	Mil. pounds	Mil. pounds	Mil. pounds	Percent
1950..	117,302 :	1,988 :	917 :	1,071 :	46.1
1951..	115,181 :	2,265 :	254 :	2,011 :	11.2
1952..	115,071 :	676 :	---	676 :	0
1953..	120,521 :	1,367 :	736 :	631 :	53.8
1954..	122,294 :	2,034 :	1,338 :	696 :	65.8
1955..	123,128 :	6,692 :	5,316 :	1,376 :	79.5
1956..	125,698 :	6,087 :	4,039 :	2,048 :	66.3

## Government Programs Increase Exports of U. S. Dairy Products



USDA

FAS-NEG. 1431

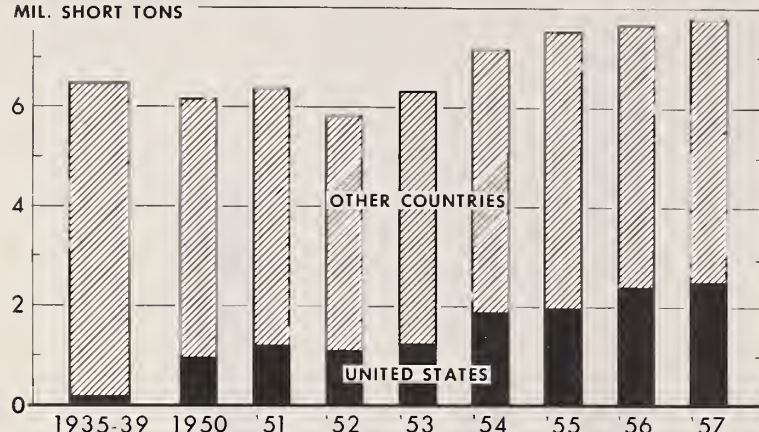
The increase in U.S. exports of dairy products from 2 billion pounds (milk equivalent) in 1950 to 6 billion pounds in 1956 was due in part to Government programs. In 1956 exports under programs were 66.3 percent of the total, a decline from 79.5 percent in 1955. The reported 1956 commercial share rose to 33.7 percent from 21.5 percent in 1955.

Dairy exports declined sharply in 1952 when foreign donations were cut off. Donations and sales at nominal prices were resumed in 1953, and exports have risen.



## Nearly One-Third World Fats and Oils Exports Come from U. S.

MIL. SHORT TONS



USDA

FAS-NEG. 1455

Fats, oils, and oilseeds, oil equivalent basis: U.S., other, and world total exports, average 1935-39, annual 1950-57

Year	United States: 1,000 tons	Other: 1,000 tons	World total: 1,000 tons	Year	United States: 1,000 tons	Other: 1,000 tons	World total: 1,000 tons
Average: 1935-39	160	6,250	6,410	1953...	1,227	5,085	6,312
Annual: 1950...	965	5,020	5,985	1954...	1,883	5,307	7,190
1951...	1,220	5,163	6,383	1955...	1,990	5,454	7,544
1952...	1,103	4,690	5,793	1956...	2,411	5,604	8,030
				1957...	2,500	5,665	8,185

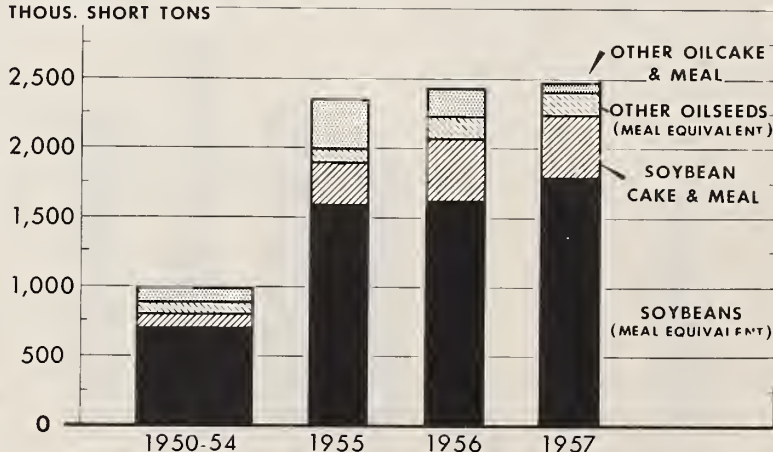
U.S. exports of vegetable protein (meal and oilseeds in terms of meal) are going to markets formerly served by Argentina, India, and Mainland China. W. Europe, with its rapidly expanding livestock industry, is a big market for protein supplements. World suppliers of these products are changing. China and India ranked first and third, respectively, before the war, but no longer hold these positions. Argentina, where production has been down, is again exporting these products.

Oilcake and meal and meal equivalent of oilseeds: U.S. exports, average 1950-54, annual 1955-57

Commodity	Average 1950-54	1955	1956	1957
	1,000 tons	1,000 tons	1,000 tons	1,000 tons
Soybeans (meal equivalent) .....	714	1,587	1,623	1,915
Soybean cake and meal .....	97	303	436	350
Other oilseeds (meal equivalent) ..	83	103	165	210
Other oilcake and meal .....	82	350	192	50
Total .....	976	2,343	2,416	2,525

## U. S. Continues to Expand Vegetable Protein Exports

THOUS. SHORT TONS



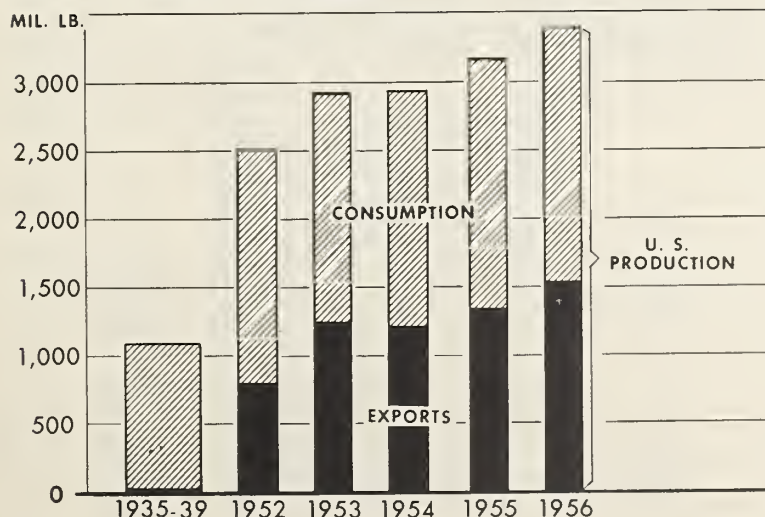
USDA

FAS-NEG. 1457

U.S. exports of soybeans and soybean oil which have risen dramatically in recent years, were nearly 90 percent of the world trade in this commodity in 1956. The figure averaged 65 percent in 1950-54. Japan is the largest U.S. customer for beans, followed by Germany, the Netherlands, and Canada. Most of U.S. oil goes to W. Europe, mainly Spain and Italy. U.S. exports of soybeans in crop year 1957 were equivalent to about 35 percent of the 1956 crop. Exports were about half beans and half oil.

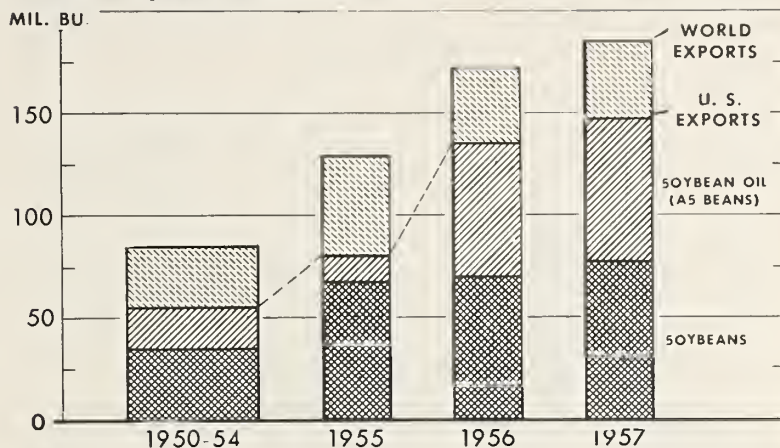
Mainland China is the other largest producer and exporter of soybeans and oil.

## Exports Are Big Outlet for U. S. Tallow & Greases



USDA

## U. S. Soybean & Oil Exports Nearly Tripled Since 1950-1954



USDA

FAS-NEG. 1454

Soybeans and soybean oil, bean equivalent: U.S. world exports, average 1950-54, annual 1955-57

Exports	Average 1950-54	1955	1956	1957
United States:	Million bushels	Million bushels	Million bushels	Million bushels
Soybeans.....	30,511	67,843	69,372	82,000
Soybean oil(as beans)	23,776	12,560	64,695	75,000
Total .....	54,287	80,403	134,067	157,000
World total.....	84,065	129,150	172,000	177,000

With tallow production up and home consumption unchanging, the U.S. is exporting more to maintain domestic prices.

Exports in 1956 accounted for 45 percent of production; the figure was 31 percent in 1952, 2 percent in 1935-39. Less use for tallow in soap in the U.S. has been offset by its use in fatty acids and animal feeds. Inedible tallow is finding use in synthetic detergents and other products.

Tallow and greases: U.S. production, exports, and consumption, with comparisons average 1935-39, annual 1952-56

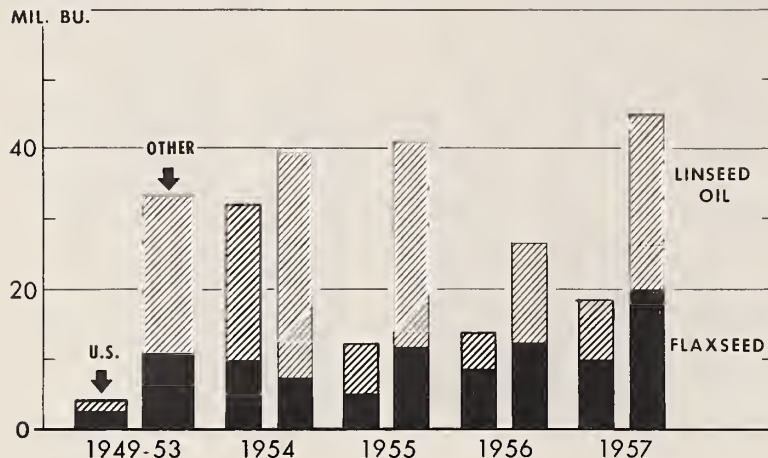
Year	Pro- duction	Ex- ports	Con- sumption	Exports as % of production
Average:	Mil. lb.	Mil. lb.	Mil. lb.	Percent
1935-39:	1,098	21	949	2
Annual:				
1952...	2,501	785	1,541	31
1953...	2,923	1,241	1,568	42
1954...	2,940	1,205	1,559	41
1955...	3,170	1,337	1,570	42
1956 1/2	3,398	1,540	1,577	45

1/ Preliminary.

FAS-NFG. 1435



## 1957 Flaxseed & Linseed Oil Exports Up Due to CCC Sales



USDA

FAS-NEG. 1452

Flaxseed and linseed oil, seed equivalent: Exports from the United States and from other countries, average 1949-53, annual 1954-57

	Average : 1949-53	1954	1955	1956	1957
United States:	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.
Flaxseed.....	2,454	9,696	4,706	8,576	10,000
Linseed oil (seed equivalent) ..	1,564	22,276	7,425	4,933	8,000
Other:					
Flaxseed.....	10,898	7,153	11,784	12,313	20,000
Linseed oil (seed equivalent) ..	22,500	32,248	29,149	14,149	24,500

The high 1957 exports of U. S. flaxseed and linseed oil came almost entirely from 1956-crop flaxseed acquired by Commodity Credit Corporation. The U. S. will have little or no flaxseed or linseed oil from the 1957 crop for export, because of disease and heat damage. World exports rose sharply from 1956 to 1957. Shipments of flaxseed from Canada (record-high crop) and linseed oil from Argentina reflected increases in the 1956 crops in these countries.

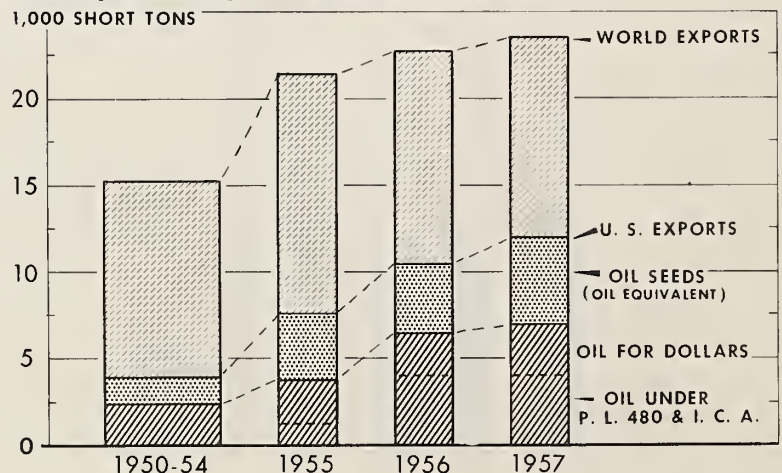
U.S. exports of edible oils and oilseeds under Government programs continue to account for a large share of total exports of these commodities. The proportion of such exports, however, fell from 38 percent in 1956 to slightly less than 30 percent in 1957 (see table).

Most of the oil shipped under programs went to Mediterranean Basin countries, where olive crops were small and consumption is increasing. All other oil shipped under programs went to Latin America.

Edible oils: United States and world exports of oils and oilseeds (oil equivalent), average 1950-54, annual 1955 and 1956, and forecast 1957

Item	Average : 1950-54	1955	1956	1957
	1,000 short tons	1,000 short tons	1,000 short tons	1,000 short tons
Oil:				
Government export programs...	116.9	116.9	400.7	300.0
Free dollar exports.....	227.8	253.4	247.2	300.0
Oilseeds (oil equivalent).....	157.5	385.2	396.5	470.0
Total U.S. exports.....	385.3	755.5	1,044.4	1,070.0
World total.....	1,528.0	1,998.0	2,280.0	2,227.0

## U. S. Exports of Edible Fats and Oils Greatly Aided by Government Programs



USDA

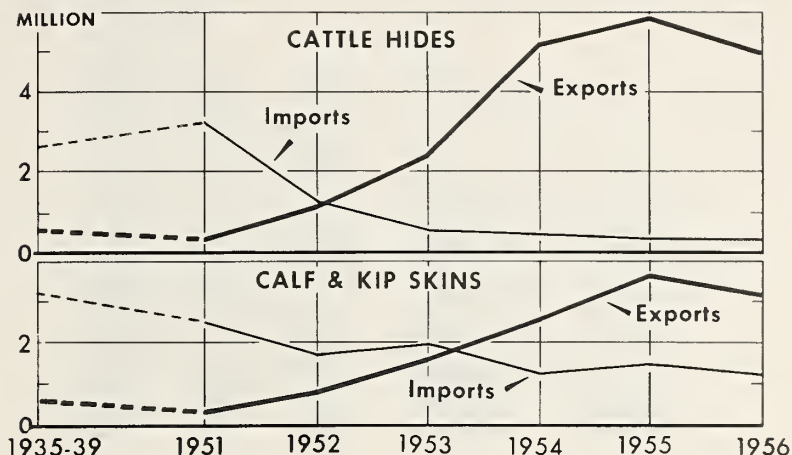
FAS-NEG. 1456



For several years the U.S. has exported more hides and skins than it imported, due to a record cattle slaughter. U.S. import requirements are less; U.S. hides and skins are competitive on the world market. Both U.S. exports and imports of hides and skins declined in 1956; the fall in exports was due to less trade with W. Europe, which took bigger shipments from Argentina.

Japan, Canada, and W. Europe are the largest outlets for U.S. exports of hides and skins.

## U. S. Large Net Exporter of Hides and Skins



USDA

FAS-NEG. 1432

Cattle hides, calf skins, and kipskins: U.S. imports and exports average 1935-39 and annual 1951-56

Year	Cattle hides		Calf skins		Kip skins	
	Imports	Exports	Imports	Exports	Imports	Exports
Average:	Number	Number	Number	Number	Number	Number
1935-39.....	2,580,152	532,744	1,611,852	(1/)	452,972	(1/)
Annual:						
1951.....	3,241,649	372,415	1,354,765	187,865	877,653	85,665
1952.....	1,230,197	1,137,955	1,354,765	449,450	273,812	344,611
1953.....	455,237	2,380,851	1,567,250	809,760	364,336	770,676
1954.....	443,228	5,177,753	959,181	977,978	229,670	1,589,432
1955.....	343,867	5,852,436	1,135,645	1,813,553	303,410	1,765,171
1956.....	340,874	4,939,958	923,860	1,847,699	271,782	1,258,584

1/ Not reported separately.

U.S. exports of lard have risen remarkably

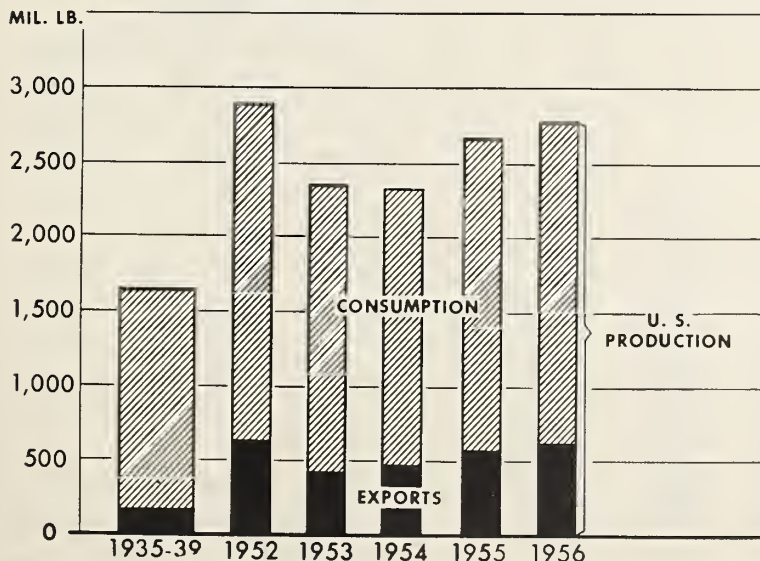
since the 1935-39 period, and 1956 exports

were highest since 1952.

The chief market in 1956 for U.S. lard was Cuba, followed closely by the United Kingdom.

U.S. per capita use of lard is now 9.9 pounds, the lowest since 1935.

## 22 % of U. S. Lard Exported



USDA

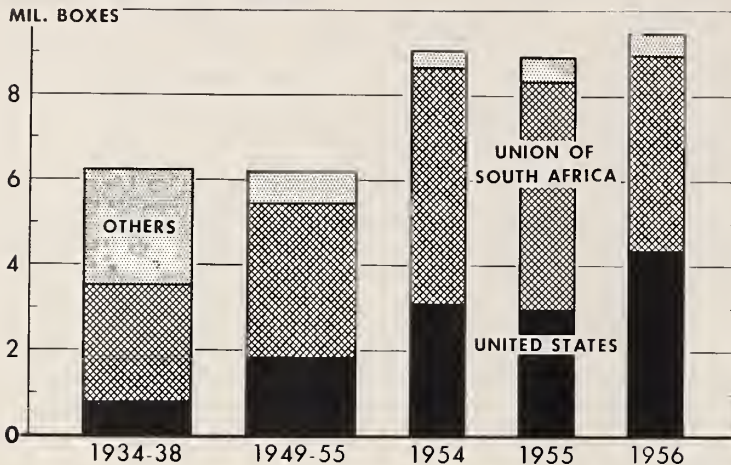
FAS-NEG. 1434

Lard: U.S. production, exports and consumption, with comparisons, average 1935-39, annual 1952-56

Year	Pro-duction	Exports	Con-sumption	Exports as % of pro-duction
Average:	Mil. lb.	Mil. lb.	Mil. lb.	Percent
1935-39:	1,630	166	1,429	10
Annual:				
1952...	2,881	634	2,087	22
1953...	2,355	423	2,016	18
1954...	2,330	465	1,779	20
1955...	2,660	562	1,998	21
1956 1/:	2,762	611	2,125	22

1/ Preliminary.

## West Europe Buying More U. S. Summer Oranges



USDA

FAS-NEG. 1443

Oranges: Imports of summer oranges into Western European countries by country of origin, averages 1934-38, 1949-53, annual 1954-56

Season and country of origin	Average 1934-38	Average 1949-53	1954	1955	1956 1/
	1,000 boxes	1,000 boxes	1,000 boxes	1,000 boxes	1,000 boxes
United States 2/	798	1,872	3,116	2,984	4,347
Union of South Africa	-	-	-	-	-
Africa	2,713	3,577	5,535	5,345	4,621
Other	2,719	753	435	619	534
Total	6,230	6,202	9,086	8,948	9,502

1/ Preliminary.

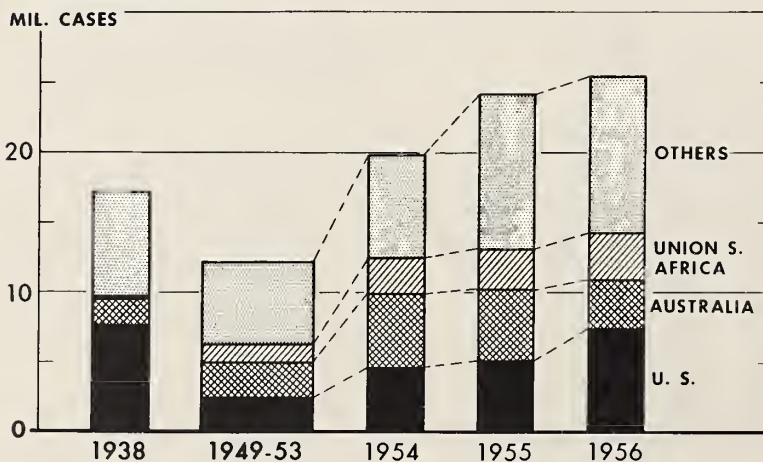
2/ Includes some winter season.

Fruit, canned: Exports from principal countries, annual 1938, averages 1949-53, and annual 1954-56

Country of origin	1938	Average 1949-53	1954	1955	1956 1/
	1,000 cases	1,000 cases	1,000 cases	1,000 cases	1,000 cases
United States	7,513	2,338	4,701	5,031	7,322
Australia	(2)1,988	2,518	5,242	5,201	3,558
Union of South Africa	-	-	-	-	-
Africa	103	1,329	2,374	2,837	3,368
Other	7,503	5,870	7,559	11,180	11,180
Total	17,107	12,055	19,876	24,249	25,428

1/ Preliminary. 2/ Year ending June 30.

## U. S. Now Largest Exporter of Canned Fruits



USDA

FAS-NEG. 1441

World consumption of both summer and winter oranges is up, and world production probably will continue upward in the future. Major market for U.S. citrus fruits in W. Europe is during the summer when the Mediterranean countries are not producing. South Africa is the U. S. big competitor for the summer citrus market in W. Europe where imports increased 600,000 boxes in 1956. All the increase came from the United States.

Sales efforts by the canned fruit industry and better markets in W. Europe have made the U. S. the world's largest exporter of canned fruit.

The United Kingdom, formerly the biggest W. European market for U. S. canned fruits, now restricts U.S. imports.

Australia's big canned pear pack has more than offset its short canned peach pack due to flooded trees during its past winter.

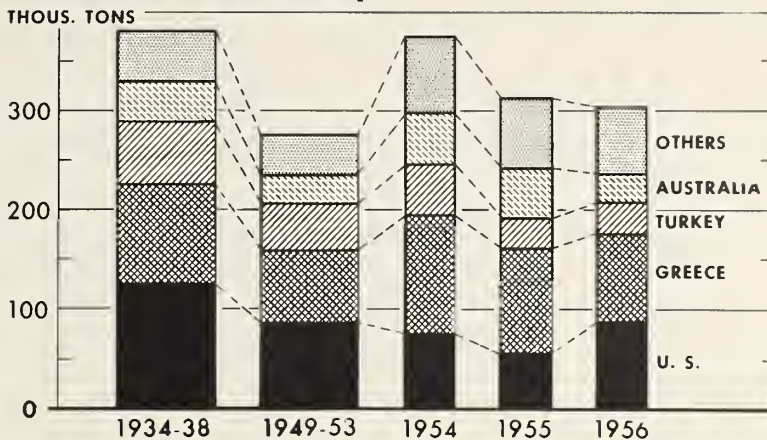
U.S. canned fruit competes in both price and quality in world markets.

Foreign production of dried fruit again is at the prewar level despite a sharp decline in production of currants.

U.S. dried fruit production, however, is down sharply from that before World War II. In recent years there has been some recovery in U.S. commercial exports because of the removal by several importing countries of restrictions against importing dried fruits for dollars.

Of all dried fruits, U.S. production and exports of dried prunes have experienced the greatest decline from pre-World War levels. U.S. dried fruits are in demand in for-

## U. S. Largest Supplier of Dried Fruits to W. Europe



USDA

FAS-NFG, 1442

Fruits, dried: 1/ Imports into Western Europe by principal country of origin, averages 1934-38 and 1949-53, annual 1954-56

Country of origin	Average		1954	1955	1956 2/
	1934-38	1949-53			
	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons
United States.....	124	86	73	56	88
Greece.....	100	73	122	105	87
Turkey.....	64	47	52	31	33
Australia.....	41	29	52	50	29
Other 3/.....	51	41	76	71	67
Total.....	380	276	375	313	304

1/ Excluding dates and figs. 2/ Preliminary. 3/ Includes mostly Yugoslavia, Union of South Africa, and Spain.

eign markets particularly because of their high standards of quality and grade.



## LIST OF MAPS AND CHARTS

### SECTION I LEVEL OF EXPORTS

Negative		Page
1419	U.S. Agricultural Exports at All-Time High .....	6
1425	U.S. Increases Its Share of World Agricultural Trade.	7
1420	Cotton and Grains Are Largest Exports .....	8
1423	72 % U.S. Agricultural Exports Go to 14 Markets ....	9
1422	West Europe Continues as No. 1 Farm Export Market.	10
1421	10 Countries Account for 78% of U.S. Agricultural Export Gain .....	10

### SECTION II SIGNIFICANCE OF EXPORTS

1411	One Harvested Acre of Six Produces for Export .....	12
1409	Amount Is Much Higher for Some Crops.....	12
1407	Farm Production and Exports at All-Time High .....	13
1408	Exports Important Part of Acreage Use and Farm Income .....	13
1410	Major U.S. Crops Benefit From Exports .....	14

### SECTION III FACTORS SUPPORTING HIGH EXPORTS

1446	40% U.S. Agricultural Exports Under Government Programs .....	16
1445	Agricultural Exports Not Under Government Programs Up 34 % .....	16
1444	Grain and Cotton Helped Most by Government Export Programs .....	17
1462	Foreign Market Main Outlet for CCC Disposals .....	17
1451	U.S. Agricultural Trade Balance Shifts: Exports Now Exceed Imports .....	18
1449	Four Countries Hold 40% of World Dollar Buying Power .....	18
1461	National Income High Among Best Customers.....	19
1453	Per-Capita Income Up in Major Export Markets ....	20
1463	Per Capita Income and Agricultural Imports Related..	20
1458	Tariff Reductions Increase the Opportunities for Trade	21
1429	GATT Concessions Important to Exports of Leading Farm Commodities .....	21
1428	Nearly 80 % U.S. Farm Exports Move Under Trade Agreements.....	22
1447	GATT Countries Take \$3 Billion of U.S. Agricultural Exports.....	22

Negative		Page
1464	Most Active Market Promotion Taking Place in Japan and Italy .....	23
1460	U.S. Government, Private Trade Share Export Promotion Cost .....	24

#### SECTION IV SITUATION BY COMMODITIES

1424	U.S. Big World Supplier of Many Farm Products 1955-56 .....	26
1413	U.S. Cotton Exports Largest in 23 Years.....	27
1415	U.S. Cotton Export Program Stabilizes World Prices	28
1414	Foreign Cotton Production Is Leveling Off .....	29
1412	Foreign Cotton Consumption at Record High Level...	29
1438	U.S. Wheat and Flour Exports Increase Greatly to Europe and Asia .....	30
1437	U.S. Supplies Nearly Half World's Wheat Exports ...	30
1427	Exports Equivalent to 54 % 1956-57 U.S. Wheat Crop	31
1426	More Wheat Exported Under Government Programs, Cash Sales .....	31
1439	U.S. Share of World's Coarse Grain Exports Down ..	32
1465	W.Europe Biggest Export Market for U.S. Coarse Grains .....	32
1436	83% of World's Wheat & Flour Exports Go to Europe & Asia .....	33
1440	U.S. Rice Exports Rise; Production and Stocks Decline	33
1416	Exports Account for Nearly One-Third Use of U.S. Tobacco.....	34
1417	Tobacco Exports Sales for Dollars Continue High ...	35
1418	U.S. Flue-Cured Tobacco Tops World Prices* .....	35
1433	U.S. Dairy Exports High Despite Small Decline ....	36
1430	U.S. Biggest Exporter of Nonfat Dried Milk .....	37
1431	Government Programs Increase Exports of U.S. Dairy Products .....	37
1455	Nearly One-Third World Fats and Oils Exports Come from U.S. ....	38
1457	U.S. Continues to Expand Vegetable Protein Exports	38
1454	U.S. Soybean & Oil Exports Nearly Tripled Since 1950-1954 .....	39
1435	Exports Are Big Outlet for U.S. Tallow & Greases	39
1452	1957 Flaxseed & Linseed Oil Exports Up Due to CCC Sales .....	40
1456	U.S. Exports of Edible Fats and Oils Greatly Aided by Government Programs .....	40
1432	U.S. Large Net Exporter of Hides and Skins.....	41
1434	22 % of U.S. Lard Exported .....	41
1443	West Europe Buying More U.S. Summer Oranges ..	42
1441	U.S. Now Largest Exporter of Canned Fruits .....	42
1442	U.S. Largest Supplier of Dried Fruits to W.Europe	43

# How to Order These Charts and Maps

Black and white photographic copies of charts and maps in this publication are available in various sizes at prices indicated below:

Size	Price	Size	Price
5 x 7 inches	65¢	14 x 18	\$2.70
8 x 10 "	85¢	16 x 20	3.30
11 x 14 "	\$1.60	(Larger sizes at \$1.50 per square foot.)	

(Prices are subject to change without notice)

When ordering photographic reproductions:

1. List negative number, title and size, and specify dull or glossy finish.
2. Give name and full address.
3. A purchase order will be accepted from State institutions. Orders from all others must be accompanied by a remittance.
4. Make all remittances payable to "Office of Information, USDA."
5. Send orders and remittances for photographic reproduction to the Division of Photography, Office of Information, U.S. Department of Agriculture, Washington 25, D. C. Minimum charge \$1 per order.

Orders from foreign countries are accepted. Please include a reasonable amount for postage.

## FILMSTRIPS

A filmstrip of all charts and maps in this publication is now available. By cutting and mounting segments of the strip you can easily make 2" x 2" slides of any of the individual charts or maps. You can get filmstrips cut apart and mounted in 2" x 2" cardboard mounts at an additional cost of 5 cents per frame.

Filmstrip (Unmounted) .....\$5.50 Color  
1.55 Black and White

## WHEN ORDERING FILMSTRIPS

Send order and remittance to Photo-Lab. Inc., 3825 Georgia Ave., N.W., Washington 11, D. C. Do not send order to U.S. Department of Agriculture.

INDIVIDUAL COLOR SLIDES .....\$ .25 each

You can get individual color slides mounted in cardboard of any chart or map shown in this chart book. Send your remittance to the Office of Inf., USDA.

Many additional charts reflecting the general economic outlook for U.S. agriculture are available in the Agricultural Marketing Service annual chartbook, "Agricultural Outlook Charts, 1958," published jointly by the Agricultural Marketing Service and the Agricultural Research Service, U.S. Department of Agriculture, Washington 25, D. C.







X MARKETING COSTS -

by D. B. (DeLoach, Chief  
Market Organization and Costs Branch, AMS

Marketing Costs Going Up

Total food marketing costs have risen without interruption since 1938, and they are still going up. The total for 1957 will be about 5 to 6 percent above 1956 and a further increase of a lesser amount is expected for 1958. Marketing costs amounted to about 60 percent of the retail cost of food in 1956 and the first 9 months of 1957. Percentagewise and dollarwise marketing costs are at their highest level since 1940.

This rise in marketing costs is not surrounded with mystery. It is a part of the price inflation that has characterized our economy since the beginning of World War II. In addition, it reflects about a 50 percent increase in the volume of products marketed to feed an expanding population, and a marked rise in the amount of services sold with food as well as greatly improved product quality for many items.

There is a twofold purpose for this statement; namely, (1) to discuss the major causative factors behind the rise in marketing costs, and (2) to comment on the remedial measures to hold down the rates of cost increases or even to reduce them. The essence of these remarks is (1) that our marketing cost structure is undergoing some very fundamental adjustments; (2) these adjustments are, in a large measure, caused by forces operating outside the marketing system for farm products; (3) the system recognizes the causes for and the importance of holding down costs and it has responded well to the challenge it faces; and (4) the outlook is that our marketing system will continue to supply outlets for foods and fibers at prices that will be directly in line with the income level of consumers.

General Price Level Rises

The index of wholesale prices for all commodity groups (1947-49 base) rose from 50.1 for 1939 to 111.7 for the first 9 months of 1957. The index of wholesale prices for raw farm products rose from 36.5 in 1939 to 90.5, an average for the first 9 months of 1957. For all food products it was 42.3 in 1939 and 103.3 for the first 9 months of 1957. In other words, each group has advanced at about the same rate as the other. These indexes reflect the change in the purchasing power of the dollar.

Hourly earnings of workers engaged in marketing food are more than three times as high in 1957 as in 1939. However, unit labor costs rose by about the same amount as the wholesale price index (table 1). This situation shows a pronounced rise in worker productivity. Sales per worker in retail stores rose from \$23,000 in 1939 to \$38,000 in 1956 in terms of 1956 dollars.

Presented at the 35th Annual National Agricultural Outlook Conference,  
November 19, 1957, Washington 25, D. C.



Table 1.- Hourly earnings of workers engaged in marketing farm foods and labor cost per unit of product, United States, 1939-56

Index numbers (1939 = 100)						
Year	Hourly earnings of food marketing workers <u>1/</u>	Unit labor cost <u>2/</u>	Year	Hourly earnings of food marketing workers <u>1/</u>	Unit labor cost <u>2/</u>	
1939	100	100	1948	212	191	
1940	102	100	1949	223	196	
1941	108	104				
1942	118	108	1950	235	199	
1943	128	113	1951	250	216	
1944	137	119	1952	263	223	
1945	147	128	1953	277	227	
1946	170	143	1954	292	231	
1947	193	166	1955	300	229	
			1956 <u>3/</u>	315	234	

1/ Average hourly earnings derived by dividing total labor cost by total man-hours for all workers. Total labor cost includes allowance for labor of proprietors and unpaid family workers.

2/ Unit labor cost is the quotient of the indexes of total cost of labor in marketing domestic farm food products sold to civilian consumers divided by the physical volume sold.

3/ Preliminary.

The rise in total labor costs since 1939 has paralleled a rise in the number of persons employed in processing and distribution activities to handle additional services required in the processing and distribution of semi-prepared and prepared foods. Likewise, a larger number of technical, clerical, professional, and sales personnel is now employed by processing and marketing firms to help expand sales, develop new products, and maintain a system of managerial controls essential to the operation of large businesses. The additional work requirements for reporting under various Federal and State social security, minimum wage, taxation, and regulatory programs also has increased the need for record keepers. It is estimated that the full-time equivalent of 5.2 million workers was employed in processing and distribution in 1956. This is approximately 37 percent more than in 1939. Corresponding labor costs were estimated at 18.3 billion dollars in 1956 or about 289 percent more than in 1939.

Between 1939 and 1957 an increasing spread of unionization in food processing and distributing industries established a work day and work week with provision for overtime payments after a specified number of hours as well as other fringe benefits. In addition, various State and Federal legislation provided for increasing kinds and amounts of fringe benefits and regulated further the conditions of employment of labor.

Interest rates have risen greatly since 1939. The annual average open-market rate on prime commercial paper is about four times as much in 1957 as 1939 and more than twice that of 1947. To quote "Survey of Current Business" (October 1956, p. 15): "The continuing pressure on available financial resources tended to push interest rates upward, with the sharpest increases appearing in short-term money and credit markets." Prime commercial paper of 4 to 6 months sold to yield  $4\frac{1}{4}$  percent in October 1957 compared to as low as  $1\frac{1}{2}$  percent in 1954.

The rapidity with which changes have taken place in the retailing of food has brought obsolescence costs into the picture very forcefully. Customary depreciation allowances that take into consideration only the use value and physical deterioration of facilities and equipment are no longer adequate in our modern marketing system. A modern retail market must be located properly, have adequate parking facilities, and be equipped to handle a very substantial volume of frozen food. While the rapid shift to frozen food has been one of the most important factors contributing to the obsolescence of some marketing facilities, an additional item of real importance has been the willingness of consumers to patronize well-lighted, clean, and modern markets rather than to those having less appealing facilities and equipment. Because of the need for modernization of marketing facilities and the desire to use the latest technologies as a means of minimizing costs, marketing firms generally have undertaken a substantial program that requires annual capital investments of several hundred million dollars.

Although no adequate figures are available as to the capital investment rate for retail and wholesale distribution, the modernization and expansion program has proceeded rapidly. On the processing side of the food industry, preliminary estimates call for an investment of approximately 828 million

67

dollars during 1957. This is the highest investment rate since 1951 when the figure reached 853 million dollars (table 2, column 2). If the 1956 price base is applied to dollar expenditures for plant and equipment for 1957, the rate of physical expansion would be as indicated in column 3 of table 2. It is significant that a high percentage of the new investments is being financed out of funds set aside from depreciation allowances and retained profits. The fact that the food industry generally is able to finance its expansion program without going into the open market for money is highly significant in terms of the ability of management groups to control the use of earnings and operating policies of their respective organizations.

Table 2.- Investment in plant and equipment in food and beverage manufacturing industries, 1939, 1947, and 1950-57

Year	Investment in terms of -	
	Current prices	1956 prices
	<u>Million dollars</u>	<u>Million dollars</u> <sup>1/</sup>
1939	243	570
1947	946	1,329
1950	760	925
1951	853	958
1952	769	854
1953	812	883
1954	765	827
1955	718	761
1956	799	799
1957 <sup>2/</sup>	828	790

<sup>1/</sup> Derived from Dept. of Commerce and SEC estimates by using "implicit price deflators" for "investments in other" new, construction, and producers' durable equipment.

<sup>2/</sup> Preliminary.

Transportation rates for agricultural products have risen rapidly since 1945. Railroad freight rates are up about 80 percent. This rise has been an important contributor to the increase in marketing costs during the last 12 years. Inasmuch as truck rates tend to follow closely those set for railroads, it can be assumed that the overall transportation rate increase is equivalent to that indicated for railroads since 1945.

Business taxes paid by sellers are costs to buyers. Such taxes are a very important part of the cost of marketing farm products as well as all other commodities. Property, business, excise, and corporate personal income taxes were the main source of about 105 billion dollars collected by Federal, State, and local governments to carry on their functions in 1956. The rise in the total tax bill from 14.1 billion dollars in 1939 to 51.9 billion dollars in 1945 and 105 billion dollars in 1956 indicates that taxes have kept pace if not exceeded other cost items in the marketing bill. There is no purpose in going into great detail as to the reasons for the rapid rise in taxes. However, we cannot ignore the fact that the tax dollar purchases less services today than it did in 1939.



Of course, our military expenditures have been the most important item in Government costs since 1941. But there also has been a substantial increase in population which requires an expansion of Government activities for schools, health and sanitation programs, and other functions that usually have been considered the obligations of State and local governments. In addition to the usual types of services that were basic factors in Government costs in 1939, Federal, local, and State governments have taken over other activities falling under the heading of welfare and social security that must be paid for from tax revenues. If we can assume that taxes collected by the various Government agencies are distributed among industries in approximate proportion to the dollar volume of sales, the share borne by food would amount to roughly 20 to 25 percent of the total cost of producing, processing, and marketing food. These taxes, including sales taxes paid by consumers, are included in the prices consumers pay for food. In other words, up to one-fourth of your food bill is made up of taxes. One cannot avoid the conclusion that our taxation program and Government financing operations connected with servicing the Federal debt are of paramount importance in the rise in the general price level since the beginning of World War II.

Profits for 59 leading food companies have risen gradually since 1945. They reached a peak of 969 million dollars in 1956 which was more than double the 1945 level, both before and after taxes (table 3). The slight downward trend of profits per sales dollar between 1946 and 1956 reflects, in part, the added efficiencies from volume distribution of food as well as the technological changes in the processing and distributing system. It is significant that the rise in total profits of leading food companies also follows rather closely the change in the general price level. Again this is an illustration of the decline in the purchasing power of the dollar insofar as it relates to the rates paid for investment and operating capital.

The preceding discussion has dealt with forces in our economy which are beyond the control of any one business organization. Each of the points mentioned in the preceding discussion is of vital importance to farmers, marketing agencies, and consumers. They determine the conditions under which a marketing organization must operate if it plans to stay in business. Likewise, they have a direct bearing on the distribution of the consumer's food dollar among farmers and marketing agencies. In many situations, changes in marketing costs are reflected primarily in prices paid by consumers rather than in those received by farmers. The next part of this discussion will relate to the problems faced by managers of marketing organizations and the manner in which they adjust their plant operations to gain the maximum efficiency possible within the general economic and social framework under which each firm must operate.

#### Management of Costs

Generally speaking, farm prices are not determined by one firm or by a small group of firms. The price structure is determined by supply and demand conditions at various marketing levels. Inasmuch as food products are fairly well standardized into quality groupings, food processing and

Table 3.- Net profits before taxes as percentage of sales and total profits and taxes, leading food companies, 1945-56

Year	Profits as percentage of sales			Totals for 59 companies		
	46 food processing companies	5 wholesale food distributors	8 retail food chains	Profits after taxes	Taxes	Profits after taxes
	Percent	Percent	Percent	Million dollars	Million dollars	Million dollars
1945	4.7	3.6	2.3	466	267	199
1946	5.8	4.4	2.9	651	275	376
1947	4.3	3.0	2.5	687	282	405
1948	3.6	2.8	2.2	619	247	372
1949	3.5	2.4	2.3	585	233	352
1950	4.6	2.1	2.4	748	342	406
1951	3.6	2.1	1.8	659	346	313
1952	3.4	1.6	1.9	671	361	310
1953	4.0	2.0	2.1	797	428	369
1954	3.8	1.9	2.0	781	402	379
1955	4.3	1.7	2.0	896	449	447
1956	4.3	1.9	2.3	969	479	490

Compiled from financial statements reported in Moody's Industrials.

distributing firms must accept prevailing market prices for like products and adapt their cost structure to the price limits imposed on them in the market place. The essential point is that processors and distributors cannot have costs in excess of prices they receive if they are to stay in business.

Although there are several forces that fix the limits on the areas for managerial decisions in processing and distributing plants and firms, managers do make final decisions regarding the use of their resources in order to come within the cost limits imposed by market prices. The managerial problem of maintaining a competitive cost structure has changed considerably since 1940. The development of industrywide labor contracts has more or less standardized wage rates and working hours by trade areas within the food industry. Facility and investment interest rates are equally well standardized. In view of the relative uniformity of input cost rates for the two major items--labor and capital--the major function of management becomes one of getting the maximum output from the inputs of labor and capital.

Higher labor rates have encouraged the introduction of new technologies as a means of keeping down unit labor costs. The modernization of existing facilities for processing and distribution and the construction and acquisition of new facilities and equipment are directly associated with managerial programs to use direct and indirect labor to the best advantage. Until recently, the availability of and the rates for investment capital obtained from open market financing or from internal sources encouraged modernization and expansion. An interesting aspect of this investment program is that it seems to be much easier for multiunit, corporate-type processors and distributors to obtain financing than for single-unit operations. This is largely a matter of selling stocks and bonds as a means of getting capital from a large number of investors.

Either by rule-of-thumb, cost accounting controls, or statistical analyses, managers are seeking to equate marginal revenue with marginal costs--the point of optimum net income. In an effort to use labor and capital resources effectively managers have attempted to develop high volume processing and distributing units as a means of keeping unit costs to a minimum. Various types of sales programs have been used to stimulate or to maintain sales volume. Expenditures for various types of sales promotion have increased in total to a point where the expenditures of this type must be recognized as an important cost item in the food trade. The higher costs of sales promotion efforts likewise have been a factor to encourage business concentrations, thereby making it possible for such expenditures to be allocated to a high-volume rather than a low-volume operation.

Attempts to effect greater efficiencies in buying merchandise or raw materials for processing have ordinarily been two stimulators to the formation of cooperative buying groups when the volume of a single firm is insufficient to get the advantages of lower prices from buying mass quantities at one time. There is reasonable basis for assuming that one of the major advantages of the multiunit processing or distributing firm comes from economies in procurement in addition to those that are to be derived from promotion and physical handling.

71



The post World War II expansion of multistore retailing, supermarkets, and retailer-processor integration is another remedial measure of management to get economies of scale through volume buying and selling. A further manifestation of management interest in economies of scale is the sale of nonfood items through retail food stores. This reversion to the "general" store has become an accepted practice among food stores and drug stores. Among food processing firms commodity specialization is decreasing rapidly and, in its place, a merger movement of some magnitude is developing. This is primarily to permit the distribution of sales and merchandising cost over a multiproduct line instead of depending on a single product. Promotional costs, dealer servicing, and control of shelf space in retail stores are major considerations in the structure and practices of food business. With such forces as these operating in our processing and distributing system, the task of locating and maintaining a small, efficient processing and distributing business is becoming increasingly difficult.

## MINIMIZING RISK IN THE USE OF FAMILY RESOURCES

By

Starley M. Hunter  
Family Economics and Home Management Specialist  
Federal Extension Service  
U. S. Department of Agriculture  
Before The  
Agricultural Outlook Conference  
Washington, D. C. November 21, 1957

Last year we considered three economic concepts--alternative opportunity, marginal utility, and diminishing returns at the Outlook meeting. This year we want to dwell for a little while on "Risk" as it related to the family-living situation and how Outlook can help in assisting families to minimize risk and maximize satisfactions over the years. Risk is inherent in anything that has to do with the future. Change is the normal rather than the unusual consideration of the future. Consequently, family planning which will help to guide the direction of change and minimize risk is highly desirable.

A slowing of the economy from the very high gear of recent years to a less inflationary level seems to be taking place. We can hope that in the long run such a slowing up will be beneficial to the country as a whole. In the meantime, many families will have difficulty in adjusting budgets. Families in which the wage earner is out of work for a time will have an especially hard time.

We need to do more to assist families to approach the family budget in a realistic manner. Over the years many writers on family budgets have tended to borrow from the economic considerations of the firm (any business) certain terms which they have applied to the family situation, for instance, the term "fixed costs". In the review of literature

913

published you will find some who place rent, taxes, and insurance in this classification. Others have expanded the term to include heating, telephone, and winter clothing. In consideration of the firm or business the "fixed costs" are those of maintaining building, machinery, etc., for the production of certain products. "Variable costs" are those going into the actual production of a given product and vary in line with the number of units of the product to be produced in a given time. I hold that these concepts do not apply to the family situation. An automobile producer may decide to produce so many units or cars during the coming season. The variable costs may be raised or lowered depending upon a decision to produce a larger or smaller number in the future. However, with the family no such decision can be made. If a family of four exists, the family must feed, cloth, and house four people in some manner. Of course, a family can dissolve; however, we are dealing with normal families and such a consideration is rarely met--few families will consider breaking up the family unit. Therefore, in budget planning we must consider first an adequate food supply that will maintain life and protect growth and development. Since this is the major single factor this need should be considered first. Other needs should be considered in the order of their importance under existing circumstances.

This brings us back to the consideration of risk. After absolute needs are met, some families may have little for such items as security, while others may be looking for a safe place to invest accumulated capital. The question for each family is what risk can it afford to take. No family can afford to risk poor health if it can possibly avoid such risk. Good health is the insurance that individuals will be able to live and work tomorrow which will help to meet the risks of the future. Few family



costs are absolutely fixed. Many commitments are made of course. We have rent, fuel, insurance, taxes, payments on cars, refrigerators and many other things that could be mentioned. However, the only absolutely fixed cost is that of tax. To reduce other presumably fixed costs for some families losses can be incurred or refinancing may reduce the burden at one point of time and extend the payment periods over a longer time.

I hope we will be able to get to more young families over the years, with the idea of a well-planned family budget that will help prevent the need for drastic reductions in some spending areas after heavy commitments. A sensible approach to expanding wants can do much to help. We all know wants are insatiable and some sensible control needs to be exercised.

Outlook needs to be given consideration in family living throughout the year. Prices, supplies, and seasonal demands all need to be kept before the buying public. I was told that families in Alaska who did their Christmas shopping in the early fall so that supplies could come in at normal transportation charges could save a third to a half of the cost as compared to families who waited until late fall and then had to pay excessive transportation charges. Conditions vary from area to area and conditions vary in relation to commodities. We need through mass media--radio, T.V., newspapers, newsletters--to get to young families with good ideas of when to buy, and what to buy. We need to get to them on a year-round basis with ideas of setting up a family budget, and adjusting that budget from year to year as conditions change. Adequate planning for daily or weekly purchases and for major expenditures over longer time periods needs to be made. Good shopping plans should be made by families backed up by adequate information on prices and supplies.

3/3

We also have an obligation to help families understand time preference. Can they afford to pay for the use of other people's money in order to start using a commodity before they have the cash to pay for it? Outlook as to money supply and cost of financing such purchases can be used to advantage any month in the year. It could be especially helpful in early fall to temper the tendency toward heavy commitments during November and December.

If Outlook is to serve its purpose, it can not be a "one shot" effort. If we are to minimize the risk of losses in the use of family resources we will have to be vigilant in watching for the opportunities to bring before the buying public principles and practices that will help them to take advantage of existing situations.

I would like to see each State prepare a leaflet which would be concerned with such factors as why plan; how plan; who plans; and, what will be necessary to make the plan successful. I believe the inclusion of a sample budget would be helpful, also. I hope we shall be able to get such a leaflet introduced into many large market areas which serve young families. It may serve as a spur to encourage some of them to think more completely concerning their family spending plans and to make adjustments that will help them to realize as much as possible from the resources they use for family living. Such a leaflet made available in markets and "sparked" on radio and T.V. could be used to reach many urban and suburban families that we are not now reaching. This is not only important to these families but it is important to Agriculture as well. When diets are squeezed to the lowest possible level, by many families, agricultural commodities "go begging" in the market place. We can serve all families from

the standpoint of the promotion of good health and at the same time we can contribute to the orderly marketing of our farm produce.

Let us return again to the function of risk bearing. We have worked long and hard to help county workers understand that they should not tell people what to do. The person who takes the risk should make the decision since he alone can assume the responsibility. All decisions are related to some point in future time and carry some risk. A decision that ties up family resources over months or years is a greater risk since the farther we try to look into the future, the less certain we can be of a given outcome.

Nothing is to be gained by fear of the future. However, judgment in the quantity of family resources to be committed over a long period of time for certain wants is definitely desirable. In a recent study in Massachusetts researchers found that <sup>1/</sup>"....48.7 percent of the families used no budgeting procedure as an aid in spending wisely. However, 31.3 percent had 'unwritten plans', while only 16.7 percent had written spending plans or budgets. Further, 37 percent of the families kept no records of expenditures. Many stated that budgeting was unnecessary for, with today's high living costs, 'all our money is spent anyway'.....Many families in the sample used credit sources. For example, during the past three or four years, 68 percent had purchased automobiles on time payment plans and 38 percent had purchased household equipment and appliances in this manner. Thirty-one percent had purchased furniture and furnishings on

<sup>1/</sup>Taken from a Preliminary Report From the Hampden County Survey on Family Financial Management April - 1957. University of Massachusetts, United States Department of Agriculture and County Extension Services in Agriculture and Home Economics Cooperating.

317



time payment plans, while 88 percent reported mortgage indebtedness. Yet, 47 percent of the homemakers stated that they did not know how to figure credit charges, and an additional 14 percent were using incorrect or inaccurate methods. Since credit costs vary widely among credit sources, and since, obviously, the cost of credit is a part of most families' living costs just as is the cost of food..." Findings of this survey leave no question in your minds, I am sure, that we need to intensify our efforts in relation to all family planning for the use of family resources. Good, well thought out plans will help to minimize risk and promote greater satisfactions in family living.







Outlook for Clothing and Textiles in 1958

By

Harry Kahan, U. S. Department of Labor

Before The

Agricultural Outlook Conference

Washington, D. C. November 1957

The topic for today is the Outlook for Clothing and Textiles in 1958. Last November, at the 34th Annual Agricultural Outlook Conference, I discussed the clothing picture for 1957 and summarized as follows:

"-----the outlook for clothing in 1957 is generally favorable for the consumer. It has the indications of a buyers market in which merchants will be attempting to trade up. This will produce a greater variety of clothing in medium and better priced lines. Average prices are expected to be slightly higher. The year 1957 may find retail prices reacting more readily to wholesale increases, with many of the increases made on a selective basis. Consumers are becoming more sensitive to price increases, which may lead to a wider range of prices between retailers."

At this time these observations are still good, although I must admit that I underestimated consumer sensitivity to price increases. This sensitivity explains why wholesalers were extremely cautious in announcing price increases and retailers complained bitterly of being obliged to absorb some increases as part of the cost of doing business.

How this has affected prices can be well understood by comparing two separate articles which appeared in the Wall Street Journal about 5 months apart. It concerns men's suit prices.

On April 15, 1957 the headline of the first article read "Men's suit prices next spring to reflect recent wool cloth rise." It was followed by this excerpt "Note to male shoppers: You will probably pay about \$2 to \$2.50 more for a medium-priced suit next spring. And top coats and sport jackets may carry higher price tags, too."

On September 24th the second article appeared. It stated "Prices of '58 Spring, Summer Men's suits expected to change little. Makers abandon idea of 5% hike they had earlier this year, though costs are up."

Industry and trade association spokesmen in the field of wearing apparel are still stressing the need for higher wholesale prices or better retail mark-up, depending on which side of the fence they are sitting. However, they all seem to agree that substantial price hikes may cut too deeply into sales volume.

NOTE: Opinions expressed in this paper are those of the author and do not necessarily represent the positions of the Bureau of Labor Statistics or the U. S. Department of Labor.

## Wholesale and Retail Clothing Prices in the Past Year

Retail clothing prices during 1957 showed remarkable stability. From September, 1956 to September, 1957 the apparel group in the Consumer Price Index rose by less than .8%, the least of any other group in the index. In that same period the index as a whole rose 3.4%.

Examining the various segments of the apparel group, we find that the index for women's and girls' wear remained practically unchanged. Men's and boys' wear rose approximately 1.2% while the index for footwear advanced 1.3%.

Because retail prices of apparel can be best reckoned from fall season to fall season and wholesale price levels generally precede by 3 to 6 months, the Wholesale Price Index for the apparel group was phased to correspond to the retail apparel index. In spite of the fact that the content of the indexes at the wholesale and retail levels are somewhat different, the comparison over the year showed only minor differences between the movement of the apparel subgroup indexes of both the Wholesale and Consumer Price Index.

## Textile Mill Prices

The price stability for apparel at manufacturing level did not extend itself to the textile mills. For the producers that make the cloth, the 1957 year can be characterized by reduced hours of mill operation, reduced number of looms in operation and lower margin of profit. The Federal Trade and Securities Exchange Commissions have reported that net operating profits of textile mills for the first half of 1957 were 297 million dollars as compared to 357 million dollars for a similar period in 1956. This represents a drop of nearly 18%. Prices of key cotton print cloth fabrics dropped to a new post war low since controls were removed shortly after World War II. Eighty-square cotton print cloth, a bellwether indicator of the cotton textile market, sold a year ago at around 19¢ a yard compared to recent quotations of as low as 17 $\frac{1}{4}$ ¢.

The synthetic textile market which suffered heavy price declines in the second quarter of 1956 is also faced with the problem of excess supply based on current demand. While there has been some upward revision of prices, often dictated by increased production costs, prices are only slightly higher than a year ago but still below the 1st quarter of 1956.

The woolen market up to mid-1957 exhibited an advancing price front which was primarily due to higher prices for apparel wool. Wool top prices advanced sharply during the 1956-57 selling season with weavers and spinners attempting to advance their prices in keeping with the rising costs of materials. Now recent market breaks in wool top prices combined with buyers caution in placing orders, the trend toward lighter weight materials for suiting, plus the inroads that man-made fibers have made on wool consumption, have obliged the weavers and spinners to fight against limited decreases.



## The Business Outlook

This brief review of how the clothing textile industries fared in 1957 provides a hint of what may be expected in sales volume and prices for the next 12 months.

This outlook for 1958 is based on the premise that general business conditions will remain substantially the same for the ensuing year. The Clothing Manufacturers of America recently polled 38 banks in 24 cities on the business outlook. Although there was an expression of greater uncertainty as to the economic prospects for the period ahead, especially in smaller cities, bankers in 10 of the largest cities in the nation felt that the current level of business will be maintained for the first half of 1958.

## Labor Outlook - Effect on Prices

The major single factor that may advance the average price of clothing next year is increased labor costs. Presently affected is women's outerwear. For instance, last month 50,000 International Ladies Garment Union workers in New York factories (who make three-quarters of all women's coats and suits) received wage increases averaging  $5\frac{1}{2}\%$ , effective December 15. This pay rise was the first general increase received by these workers since May 1953. A higher wage pattern can be expected to include about 200,000 other members of the ILGWU under wage contracts about to expire or that permit cost-of-living pay reopenings.

The clothing industry has been struggling to keep from falling too far behind general prosperity of the country, and for several years this fact has been a restraining force on an advancing wage level within the industry. However, even though there has been little increase in the wage level there has been other increases in direct and indirect costs. In the face of these higher costs the one factor that has helped to keep apparel prices from advancing more rapidly in the last few years has been the ability of the manufacturer to rearrange his direct costs of production and still keep his garment within a price line. The manufacturer in doing this may find that he may be obliged to absorb part or all of the increases in other costs such as financing, advertising and administrative expenses.

To what extent manufacturers may be able to absorb these new additional costs depends a good deal upon the existing price-quality relationship and the relative profit margin currently being earned. Increased production costs of this magnitude, however, will be eventually translated into price increases. The long range effect should be less of low-end quality production and a greater emphasis on better qualities in higher price brackets.

During the first 6 months of 1957, 5,600,000 factory workers in all industries under wage agreements received pay increases as compared to 3,200,000 during a similar 6-month period in 1956. This is an increase of 75%. Pointing to the rising importance of escalation clauses in wage

199



contracts is the fact that deferred payment and escalator increases accounted for 37% of the pay hikes during the first half of 1956. During the first half of 1957 the proportion rose to 73%.

These increased labor costs whether or not directly related to apparel manufacture set a pattern to which the apparel industry must adapt itself.

The increasing cost of labor in itself does not allow for a generalization that the clothing price movement should be up in 1958.

Even with the closing down and liquidation of many mills during the last 3 years, the production capacity of the existing mills is still in excess of demand as evidenced by continued voluntary curtailment of mill production. With the exception of short seasonal flurries, the past 5 years have seen wholesale prices for cotton and man-made textiles drift downward. The recent strong upswing in wool and worsted prices due primarily to large increases in the prices of wool tops, has now been reversed because of sharp declines in wool top prices and poor selling for the spring 1958 season. According to industry representatives, the wool industry is in the midst of its worst slump since World War II.

#### Consumer Clothing Expenditures

This leads us to the problem that the clothmakers and clothing manufacturers have wrestled with a long time--the need for increased consumer demand.

Between 1947 and 1956 personal consumer expenditures for all goods and services rose from 165 billion to 267 billion dollars, an increase of 61.8%; civilian population increased by 24 million or 16.7%; and per capita spending moved up from \$1150 to \$1597, an increase of 38.9%. In this consumer spending pie, clothing had a 12 $\frac{1}{2}$ % slice in 1947. By 1956, this slice had narrowed to 9.0%, the shrinkage being over one-fourth during the decade. In current dollars, the 1956 per capita expenditure for clothing was approximately the same as in 1947. If we eliminate the effect of price increases as measured by the BLS apparel index at retail, the per capita expenditure for clothing has declined about 8% between 1947 and 1956.

For each successive year since 1947, the proportion of total per capita expenditure represented by clothing has been either lower or unchanged. The meaning of this trend is that -- the clothing industry is not even successfully holding onto its earlier share of the consumer dollar.

However, some of the more recent shifts in expenditures for clothing may indicate a possible reversal of this trend. For instance, from 1954 to 1956, the per person expenditure for clothing in constant dollars has moved up 5.4%, or in other words, the volume of clothing purchases is on an up-trend. In addition, retail clothing sales in 1955 increased 5.1% over 1954 while in 1956 sales figures topped 1955 by 5.4%.

### Recent Clothing Price Trends

Prices of apparel at the retail level have fluctuated within a narrow range over the past 5 years. Comparing the September 1952 CPI to September 1957, we observe that the index for men and boys and apparel advanced a modest 1.7% while women's and girls' apparel declined 1.9%. Only footwear with a 11.7% increase exhibited a sustained upward price movement. Over this 5-year period the apparel group index rose 1.4%. In this last September to September period (1956-57) the women and girls apparel index remained practically unchanged, footwear showed less than 1% increase while men and boys apparel advanced 1.2%.

### Clothing Outlook - 1958

The outlook for clothing in 1958 at both retail and wholesale levels is mixed. There is a lack of bouyant optimism among sellers. Men's topcoat and overcoat volume remain poor. Lagging retail coat sales have resulted in disappointing fall coat reorders. Women's coat and suit volume has also failed to meet earlier expectations. The sharp competition among women hosiery manufacturers continues with many retail outlets featuring hosiery as a sales promotional item.

There are bright spots in the area of boys wear and men's and boys' sports-wear with a mixed picture on women's and misses dresses. Fall shoe business based on trade reports is up to expectations with good selling on children's shoes.

When there is a lack of optimism it is generally accompanied by greater caution in planning for the next season. Retailers also hesitate to lengthen their mark-up or to pass along a full retail mark-up on many of the wholesale price increases while manufacturers reconsider their proposed price increases.

It also leads us to believe that out of these conflicting pressures for price changes the price movement for apparel is more likely to be up during both the spring and fall 1958 selling season.

At this time the price outlook for shoes based on statements made by manufacturers attending the National Shoe Fair, points to an average 5% price increase at wholesale level with price changes made on a selective basis. If passed on to the consumer the price increase may be about 7%.

For big ticket items in women's clothing such as coats and suits the increased labor cost may result in fewer manufacturers producing lower priced lines with selling emphasis on higher priced merchandise. It also should result in quality adjustments within limits of consumer acceptability for a given retail price line. At least part of the increased labor cost may show up on retail price tags. In men's coats and suits a strong factor against price increases is the sagging woolen market and consumer preference for lighter weight wool and wool mixtures.



For small ticket items such as skirts, blouses, dungarees and slacks increased costs may be more directly applied to the retail price and accepted by the consumer.

### Consumer Demand for Clothing

Adequate production facilities in the apparel industry where small and medium sized companies dominate lends itself to closer competition. The industry is promotion minded and sensitive to changing styles, newer fabrics and the changing pattern of consumer preferences. Evidently the inability of the clothing industry to capture its former share of the consumer's dollar is the result of a lower priority standing for a part of the consumer dollar. The trend towards home ownership, relaxed social demand for "dressing-up" and the burden of installment payments often makes the purchase of clothing the item of deferrable expense in the family budget. While the U. S. expenditures for all goods and services increased by over 100 billion dollars since 1947, only about 4% of this increase found its way into expenditures for clothing.

I have selected hosiery and men's coats to illustrate this lag in sales over the 10-year period. These items were chosen in order to eliminate as much as possible the factor of replacement by substitution. For example, a man's suit may be replaced by a jacket and a pair of trousers, a woman's suit can be replaced by a skirt or a dress. For hosiery or outercoats only limited substitution is possible.

Hosiery - Between 1947 and 1956 the consumption of women's hosiery increased by 3.1% but population of women of ages 15 and over increased by 12%. On a per capita basis, consumption of women's hosiery dropped 8.9% during this period. The decline in the per capita consumption for men's hosiery was more dramatic - 24.5%. The decline in the per capita consumption of children's hose of 17.9%, although not as severe as in men's hosiery is all the more significant because the population of children under the age of 15 increased by almost 40%.

Men's Coats - Men's overcoats have been declining in popularity for a number of years with the topcoat generally replacing them. Therefore, we can best illustrate by using a combined total for both.

The number of men's overcoats and topcoats produced in 1947 and 1956 was approximately equal - about 7.2 million. However, during this period, the population of men of ages 21 and over increased by about 2.3 million. If we use the production - population figure for 1954 or 1955 the chasm between potential customers and garments manufactured becomes all the broader.

We might infer that consumers are making their clothing dollar stretch a little further by greater care and longer wear. It may also mean that of total clothing expenditures, an increasing proportion is being applied to just clothing replacements rather than wardrobe additions. Although the clothing industry relies heavily on changing fashions, styles and colors, to out-date apparel that could otherwise be worn, since the 1950 "newlook"



for women and possibly the current "ivy league" tailoring for men, there has been no sweeping changes in the fashion world. There has also been a shifting of emphasis for specific items of apparel, especially to casual wear.

The total U. S. expenditures for clothing for each of the years between 1947 and 1956 are reasonably close. Such a steady rate of spending seems to imply that consumers are buying according to current needs based on budgetary allowances.

Summary:

The outlook for the clothing industry for 1958 is not optimistic yet there are a number of factors pointing to the start of an upswing, particularly an apparent rise in the per capita expenditure for clothing.

Prices for clothing may be generally higher, but increases should be modest.

The consumer should have no problem making clothing selections.

TABLE I

Per Capita Comparison of Clothing Expenditures to Total Expenditures  
1947 - 1956 - Current Dollars

	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5
Year	Personal (1) Consumption Expenditures (Millions-Dollars)	U. S. (2) Civilian Population as of July 1 (Millions)	Per Capita Annual Expenditures For Goods and Services Col. 1 ÷ Col. 2	Clothing (3) Per Capita Expenditures	Percent of Per Capita Expenditures For Clothing Col. 4 ÷ Col. 3
1947	164,973	143.4	1150	144	12.5
1948	177,609	146.1	1216	147	12.1
1949	180,598	148.7	1214	136	11.2
1950	194,026	151.2	1283	133	10.4
1951	208,342	153.4	1358	139	10.2
1952	218,328	155.8	1401	143	10.2
1953	230,542	158.3	1456	138	9.5
1954	236,557	161.7	1463	135	9.2
1955	254,421	164.3	1549	139	9.0
1956	267,160	167.3	1597	144	9.0

1/ Department of Commerce  
Survey of Current Business - July 1957 - Table 3  
Bureau of Census

2/ Current Population Reports - Population Estimates - Nos. 98, 146

3/ Aggregate Clothing Expenditures Divided by Population - See Table II

TABLE II

Per Capita Clothing Expenditures  
1947 - 1956 - Current and Adjusted Dollars

	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5
Year	Clothing Aggregate Expenditures		U. S. Civilian Population as of (3) July 1	Clothing Per Capita Expenditures	
	Current (1)	1947-49 (2)		Current	1947-49
	Dollars (1) (Millions)	Dollars (2) (Millions)		Dollars Col. 1 ÷ Col. 3	Dollars Col. 2 ÷ Col. 3
1947	20,578	21,193	143.4	144	148
1948	21,416	20,692	146.1	147	142
1949	20,177	20,299	148.7	136	137
1950	20,111	20,501	151.2	133	136
1951	21,387	20,007	153.4	139	130
1952	22,003	20,797	155.8	143	135
1953	21,849	20,848	158.3	138	132
1954	21,764	20,867	161.7	135	129
1955	22,877	22,061	164.3	139	134
1956	24,109	22,852	167.3	144	136

<sup>1/</sup>Department of Commerce - National Income 1954 and Survey of Current Business, July 1957 - Table 30 (Line 7 less lines 13, 14, 15)

<sup>2/</sup>Consumer Price Index - Apparel Group Index Used as Deflator

<sup>3/</sup>Bureau of Census - Current Population Reports - Population Estimates Nos. 98, 146











UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Marketing Service

THE OUTLOOK FOR COTTON

Statement Presented by Frank Lowenstein at the  
35th Annual Agricultural Outlook Conference,  
Washington, D. C., November 20, 1957

During the 1956-57 marketing year the United States was faced with the largest supply of cotton in its history. The carryover on August 1, 1956 was at a record high of 14.5 million bales. In one season, this large carryover was reduced by more than 3 million bales and by August 1, 1958 the carryover probably will be down another 2.3 million bales. From figure 1 it is apparent that disappearance has increased from the levels of 1952-55 because exports increased. Coupled with this increase in exports were declines in production. These two factors account for the sharp drop in stocks in 1956-57 and the prospective drop in 1957-58.

It seems to me that the history of the current and past season poses three questions which also bear on the future of the cotton industry in this country.

1. Why did exports in these two seasons increase so sharply above exports of the preceding few years?
2. Why has domestic consumption of cotton held steady at a relatively low level?
3. What caused production to decline?

Question 1 is concerned with the cause of recent increases in exports. For many years the price of upland cotton in the U. S. was supported at 90 percent of parity. From 1946 to 1954 both the production and the consumption of cotton abroad increased steadily. In 1956-57 the U. S. reduced the export price for its cotton. As shown in figure 2, the consumption of cotton abroad continued to increase while production leveled off. In other words, the gap between foreign cotton consumption and production widened. Figure 2, also shows us that over the years U. S. exports plus foreign production tend to equal foreign consumption. In the years when consumption abroad exceeds U. S. exports plus foreign production, foreign stocks are reduced. This difference is usually compensated in the following season when foreign production plus U. S. exports exceed foreign consumption. Among the important forces which tend to modify this compensating movement are variations in prices, price anticipations, and the level of consumption. Lower prices and large consumption tend to cause foreign countries to carry larger cotton stocks. Again looking at figure 2 we see that foreign consumption exceeded U. S. exports plus foreign production in 1955-56 and that the reverse was true in 1956-57.

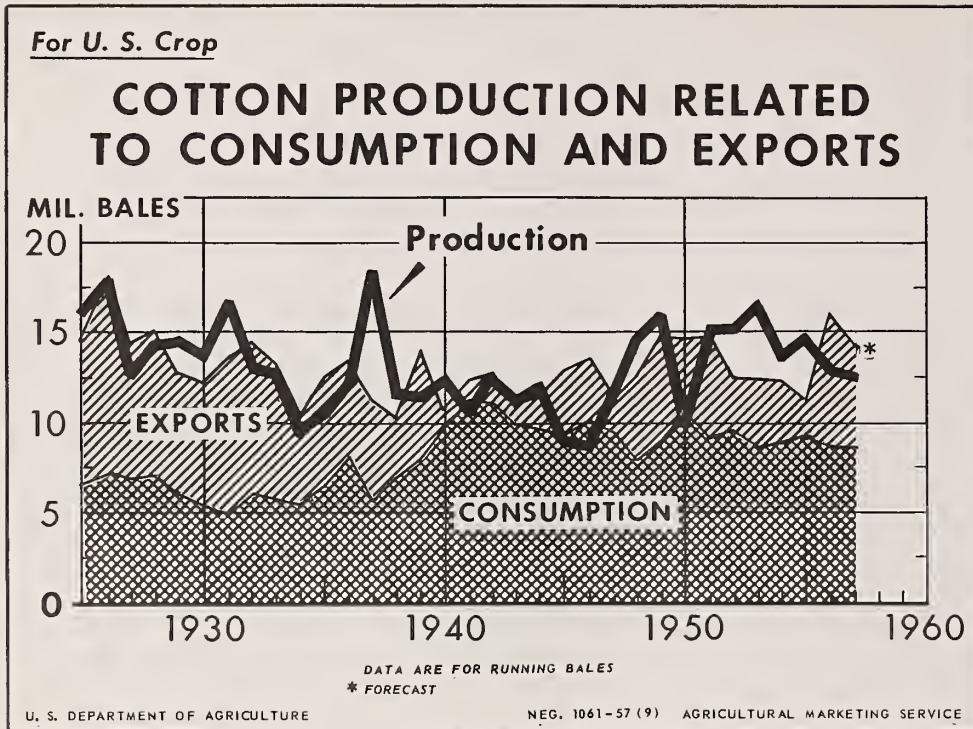


FIGURE 1.

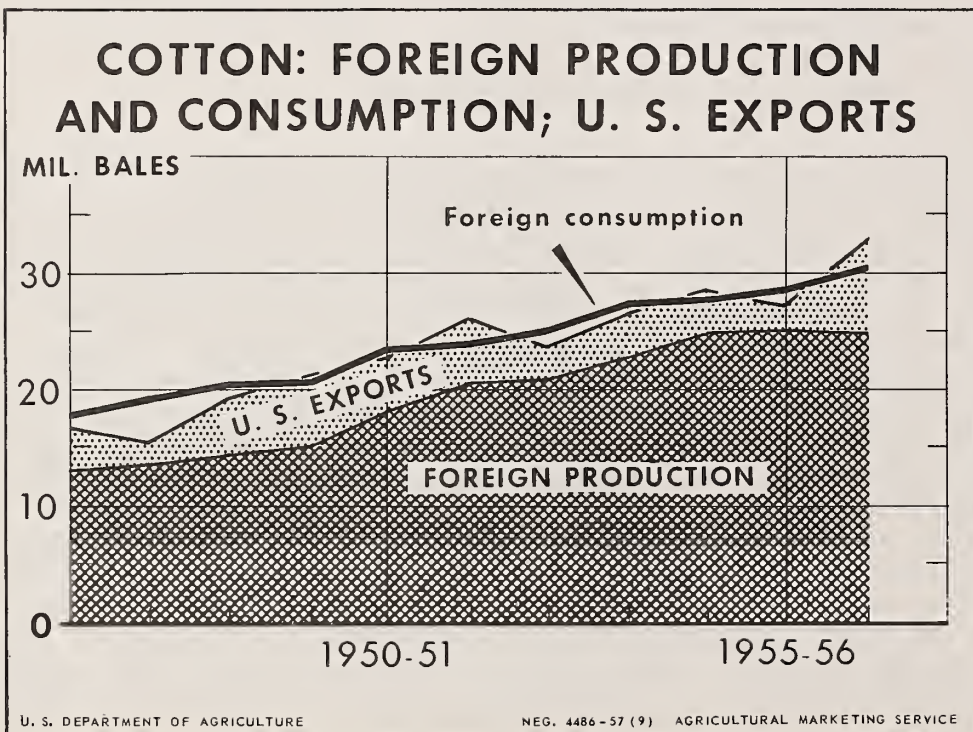


FIGURE 2.



As we would expect, foreign stocks at the end of 1955-56 were down. Figure 3 indicates that they were the lowest since August 1952. The upward stock adjustment in 1956-57 was associated with the larger U. S. exports. But foreign stocks did not increase as much as U. S. stocks declined because of ~~increases~~ in foreign consumption.

The facts indicate that lower export prices were effective in increasing U. S. exports in 1956-57. Lower export prices tend to effect foreign production, foreign consumption, and foreign stocks. The changes that occurred in 1956-57, a leveling off of production and increases in consumption and stocks, were those we would expect from reductions in prices. It must be remembered, however, that other factors as well as price affect these variables.

For 1957-58 with U. S. export prices only slightly above those of 1956-57 we expect only a slight increase in foreign consumption and a slight decrease in production. Although foreign stocks increased in 1956-57, they are expected to remain fairly stable in the current season. At present price and consumption levels the August 1957 stocks do not seem out of line.

Under these circumstances U. S. exports during 1957-58 probably will be about the same as the difference between foreign consumption and production or about (\$5.5) million bales. This is smaller than exports in 1956-57 by about the amount of the foreign stock increase in that season but larger than exports of any other season since 1951-52. Furthermore, continuation of the current export price level into the future probably would encourage a slower rate of growth in foreign production than in foreign consumption of cotton and there would be a tendency for U. S. exports to continue to increase. Higher export prices might cause exports to decrease.

Now let us turn to question 2 which is: Why has domestic consumption of cotton held steady at a relatively low level? In 1956-57 domestic mill consumption of cotton declined about 0.6 million bales from the preceding season to about 8.6 million. Consumption is not expected to increase during 1957-58. This decline in consumption occurred at the same time that domestic prices for cotton fell.

As shown in figure 4, the support rate and the price received by farmers declined in 1956 and 1957. If other forces remained unchanged, we would expect cotton consumption to increase slightly with a decline in prices. However, consumption did not increase and the current relatively high level of gray goods stocks indicates that there probably will not be much increase in the next few months.



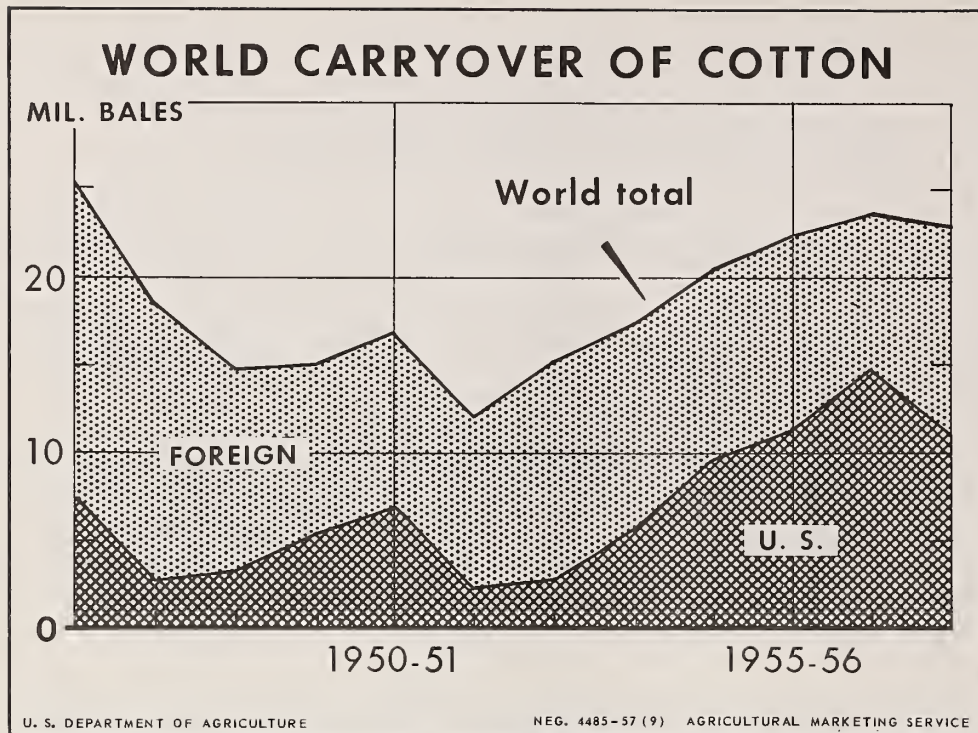


FIGURE 3.

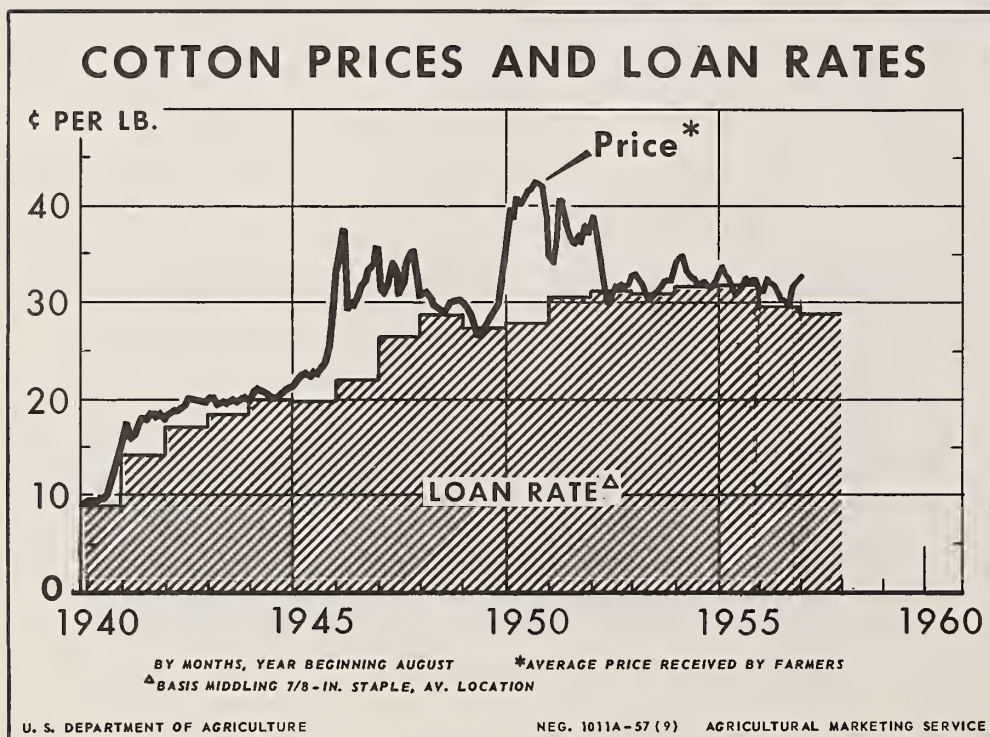


FIGURE 4.

As shown in figure 5, the consumption of cotton per capita has been trending downward since the end of World War II. At the same time the consumption of manmade fibers per person has been trending upward. Although not all manmade fiber consumption substitutes for cotton, a good portion does. The important thing here is what has happened in the past two years.

Cotton consumption per person in 1957 is estimated to be about 9 percent lower than in 1955 and manmade fiber consumption per person is down about the same percentage. In other words, cotton's share of the fiber market in 1957 was as large as it was in 1955. The forces which have depressed mill consumption of cotton also have depressed the consumption of other fibers. The consumption of cotton did not decline more than consumption of its competitors, perhaps because of lower relative prices.

The forces which are currently depressing cotton consumption stem from general economic forces rather than from competition among the various fibers. Briefly, these forces are a stabilization in the level of consumer income per capita, expressed in constant dollars, and some inventory readjustment from the retailer to the mill.

The forces which are currently depressing fiber consumption will not continue indefinitely. Furthermore, some factors which influence fiber consumption per capita over the long haul are not apparent from a short-term analysis. One of these factors is the replacement relationship between cotton and manmade fibers or the cotton equivalent of manmade fibers. Another is the declining expenditure per person on apparel.

Total fiber consumption per person during the postwar period has shown a declining trend. Part of this trend has been caused by the fact that a pound of manmade fibers substitutes for more than a pound of cotton. To put it another way, it takes more than 1 pound of cotton to replace 1 pound of manmade fibers. This is particularly true of the noncellulosic manmade fibers such as acrilan, orlon, nylon, etc. As the consumption of the noncellulosic manmade fibers increases, total fiber consumption per capita in actual pounds will tend to decline. The amount of manmade fibers or cotton used depends on the success of research in adapting the various fibers to specific uses and the relative prices for cotton and the manmade fibers.

Expenditure surveys indicate that people in certain age and sex groups spend less on clothes than individuals in other groups. Since the end of World War II, the number of people in the lower spending groups has increased relative to the total population. If the population is adjusted to an equivalent expenditure base, it is found that the number of clothing expenditure units has increased less rapidly than has population. Clothing expenditure unit growth may catch up with population growth some time between 1965 and 1970.

///

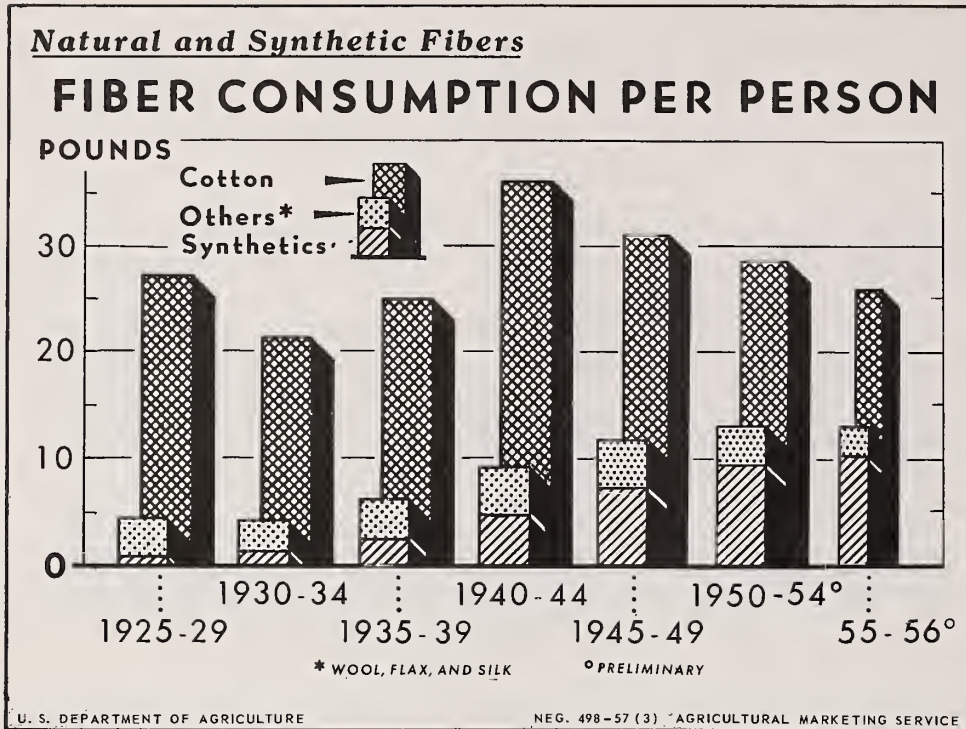


FIGURE 5.

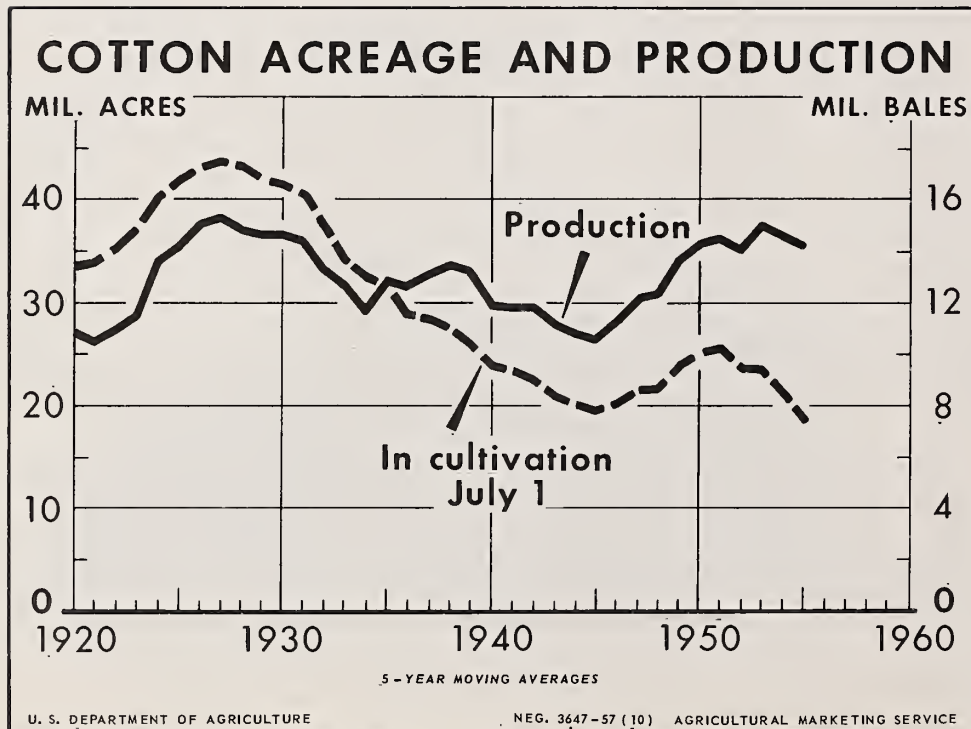


FIGURE 6.



For the longer term, the amount of cotton consumed will depend on the complex interplay of many forces, including the relative prices for cotton and manmade fibers, the replacement relationships between cotton and manmade fibers, the prosperity of the country and the age-sex composition of the population. It is not possible to forecast all of these factors for even a few years into the future, but the downtrend in cotton consumption per person in the past does not necessarily indicate a continued downtrend in the future.

Now let us turn to question 3: What caused production to decline? The 1957 cotton crop is estimated (as of November 1) to be about 1.5 million bales smaller than the 1956 crop. This reduction in the crop stemmed primarily from a sharp reduction in acreage caused by acreage allotments and the Soil Bank. The 1957 harvested acreage was about 12 percent smaller than 1956 and the average yield was up about 1 percent. In other words, the yield of cotton per harvested acre was maintained at about the levels of the recent past. This occurred despite unfavorable weather conditions.

One of the most striking aspects of the cotton industry over the years has been the sharp increase in the yield of cotton per acre. As shown in figure 6, acreage has declined much more than production. Actually it now takes less than half the acres to produce a bale of cotton than it took in the 1920's. Part of this increase in yields has come from the westward shift in cotton production. The highest yielding States in the cotton belt, Arizona, California, New Mexico, and Nevada are producing about 22 percent of the 1957 crop, compared with an average of about 6 percent in 1935-39. Part of the higher yields is coming from improved technology of all kinds as witnessed by the increasing yields all over the cotton belt.

Whatever the causes, the higher yields point to an inescapable dilemma. Cotton producers must have larger markets for their product or produce less cotton. Smaller production would mean the use of less productive resources, either land, labor, or capital.

To sum up - trends of the recent past indicate that markets for U. S. cotton could increase over the next few years. The extent of the increase and whether there is any increase at all depends on many factors. Some of the important forces are general economic conditions, the level of prices for cotton and competing fibers, cotton production and consumption abroad, the replacement relationships between cotton and manmade fibers, and the age-sex composition of the population. The upward trend in yields per acre emphasizes the need for larger markets or the necessity for a steadily decreasing use of productive resources for cotton production.



UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Marketing Service

X OUTLOOK FOR DAIRY PRODUCTS

Statement presented by H. C. Kriesel at the  
35th Annual Agricultural Outlook Conference  
Washington, D. C., November 21, 1957

The American Dairy Industry in many ways showed significant improvement in its statistical position in the past year. The next 12 months seem to hold in store some further progress. To individual producing, processing or distributing firms, of course, the changes appeared more real and dynamic than the statistical changes to an economic or statistical observer.

Among the achievements of the past year were record production and sales of milk by farmers and record cash receipts from the sale of milk products. All three promise to reach new heights in 1958.

The increased production of milk per cow dramatizes changes which are taking place in American dairy farming. This is shown on our first chart, which has on it also the trend lines for number of milk cows and total milk production. Since 1952, production per cow has been going up at a constant rate -- around 2 percent per year the past decade. The number of milk cows, on the other hand, has been edging downward since 1944, except for a slight increase from 1952 to 1953. The reduction in this number is the net effect of a decline in number of farms with milk cows of 5 percent a year or so and an increase in the scale of dairy farms. Total production of milk made its biggest jump from 1952 to 1953, advancing nearly 6 billion pounds in that time. Since then the increases have been more gradual. The total for 1957, at about 127 billion pounds, will be above 1956 by 1.3 billion pounds. With record large supplies of both feed concentrates and roughages and relatively favorable price relationships, it is likely that milk production will continue upward well into 1958, if not through the entire year. Total output in 1958 probably will be larger than in 1957 by between 1 and 2 billion pounds.

All categories of farm use of milk declined again in 1957, resulting in a greater increase in sales of milk by farmers than in production. Also significant is the fact that sales of the milk solids-not-fat by farmers have increased even faster than sales of milkfat, since farmers are continuing to shift from the sale of farm-separated cream to the sale of whole milk. The switches in use of milk on farms and in method of sale probably will continue for several more years before there is a significant leveling off in rate of change.



Milk prices in general have changed little in the past year and relative stability is likely for the year ahead, unless price-support levels are changed. The price for manufacturing milk has been essentially unchanged, except mainly for some seasonal variation, since the support level was raised on April 1, 1956. Prices for fluid milk have increased in a number of markets of the country because of premiums established over the minimum levels. The most significant increases have occurred in the northeastern part of the country, partly reflecting a decline in production in that area which affected price through the pricing formulas. In terms of the average price received by farmers for all milk, there was little change. The U. S. average price received by farmers for all milk will be \$4.20 per 100 pounds for 1957, compared with \$4.13 in 1956.

With a slight gain in both the volume of milk sold and in prices received, farmers' cash receipts from the sale of milk products increased to a record 4.6 billion dollars in 1957, more than 100 million dollars over 1956. Another new record high is likely in 1958. Net income from dairy farming also showed some improvement in the past two or three years. This is borne out by data from the Agricultural Research Service on family types of dairy farms. However, hourly returns to operator and family labor still are low compared to many other lines of farming and most nonfarm pursuits.

Prospects for consumer incomes in 1958 assure a demand as strong in 1958 as in 1957. It is interesting to note the wide differences in the past several years in the relationship of consumers' expenditures for different dairy products to their incomes. This is shown in the accompanying table. In 1956 the average disposable income per person in the United States was 38 percent greater than the average for 1947-49. In the same year the retail value for a given quantity of food consumed per person was up an estimated 15 percent. Evaporated milk, butter and eggs were among those items for which expenditures did not increase in 1956 over the postwar average. For butter and eggs, both the unit cost to the consumer and consumption per person were lower in 1956 than in 1947-49. For evaporated milk, consumption was considerably lower in 1956 but the average retail price was slightly higher than in 1947-49. In the case of margarine, an important alternative to butter at the retail level, a 46-percent increase in consumption offset a 27-percent lower price, giving a 6-percent increase in the retail value of consumers' purchases. Consumption per person of fluid milk and cream, which accounts currently for more than one-half of the consumer's outlay for dairy products, declined only 1 percent. The decline in the fluid milk and cream combination is due to the decline in fluid cream; whole milk actually increased slightly. With the retail price of milk up 19 percent, the value of per capita consumption increased 18 percent in 1956 above the postwar average.

All of you are aware of the diverse uses made of milk. The Crop Reporting Board estimates the production of about 50 manufactured dairy items, many of these including several sub-items. In addition, many fluid milk items are consumed for which no individual estimates are made.

There is a surprisingly wide difference in consumption trends among these different items. This we see in the two-section line chart. To make generalizations about consumption of dairy products, we need some means of combining these many unlike items. This we have attempted to do by computing separately the per capita consumption of milkfat on the one hand and solids-not-fat on the other. In recent years per capita consumption of solids-not-fat has been around 48 pounds compared with 46 pounds in 1950 and less than 40 pounds in the 1920's and 1930's. Consumption of milkfat in all forms, on the other hand, has been 27 pounds per person in the last few years compared with 29 pounds in 1950 and 31 to 32 pounds in the 1920's and 1930's.

The prospective increase in population in the next year will little more than absorb the increase in probable production of milk, assuming no change in per capita usage. Hence, prospects point to a continued surplus of milk production in the neighborhood of 5 billion pounds, plus or minus a reasonable allowance. This would be at least 4 percent of production. In the current year more is being purchased than under the price-support program in either of the two preceding years.

Large-scale disposition of dairy products purchased under the price-support program have been continuing currently. Butter stocks are larger than they were at this time last year but they are not out of line with prospective outlets. Stocks of cheese and dry milk are about the same as a year ago. Stocks of all three items are considerably below their peak levels of three years ago. A large portion over the past several years was disposed of at a small recovery of the original cost. Over an 8 and one-half year period the net cost to the Government of the dairy price-support program was 1.5 billion dollars.

With supplies of milk continuing to exceed available outlets, a general upward trend in dairy prices is unlikely. While the stock phase of the dairy problem has been overcome, a surplus at prevailing prices promises to be with us for some time.

(Table appears on next page)

Value and consumption per person and unit cost of specified  
foods compared with consumer income, United States,  
1956 as a percentage of 1947-49

Item	Value per capita 1/	Consumption per capita 2/	Unit cost to consumer 3/
	Percent	Percent	Percent
Beef and veal	122	125	98
Pork (excluding lard)	87	99	88
Lamb and mutton	93	91	102
All meats	105	111	95
Eggs	84	96	88
Chicken	106	132	80
Fluid milk and cream	118	99	119
American cheese	116	107	108
Evaporated milk	77	76	102
Butter	75	82	91
Margarine	106	146	73
Fruits and vegetables	113	96	118
Potatoes	113	88	128
Cereals and bakery products	111	88	126
All foods	115	103	112
Disposable income, per person		138	

1/ Values per person for all livestock products and for margarine are based on product of quantity consumed by civilians times average cost per unit. For other items and for all foods, indexes of per capita values are products of indexes of prices times indexes of civilian consumption. This multiplication of index numbers partly accounts for the fact that the rough estimates given above differ from estimates of food expenditures as published by the Department of Commerce. Such a method does not reflect shifts in consumption within food groups or increases in processing and service costs connected with larger movements of food through restaurants and hotels. Moreover, the Commerce series includes some items not included in the above table.

2/ All data are comparable with those carried regularly in the National Food Situation except for eggs and chickens, which are given in primary distribution weight in this table instead of retail weight; only American cheese is used here instead of all whole milk cheese; the index of fruits and vegetables used here includes sweetpotatoes, dry beans, and peas in addition to those items regularly carried in the Food Situation index.

3/ For all livestock products consumed from farm marketings, average retail prices published in the Marketing and Transportation Situation were used. In addition, for eggs, chicken, milk, and butter, quantities consumed on farms were valued at prices received by farmers for those items. For margarine and remaining items, indexes were published by or worked up from Bureau of Labor Statistics data.



UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Marketing Service

\* THE OUTLOOK FOR EGGS AND POULTRY IN 1958 t

Statement presented by Edward Karpoff at the  
35th Annual Agricultural Outlook Conference,  
Washington, D. C., November 21, 1957,

"Cautious optimism" are risky words with which to open an outlook speech, because these words have now become a cliché among economic forecasters. But they are my most succinct words by which to describe the egg outlook. "Cautious optimism" also applies to the 1958 turkey outlook, although there the caution will have to prevail longer than for eggs, and the degree of optimism is less certain. But for broilers the 1958 outlook, compared with 1957, is for "More of same".

You know that early-1957 prices for eggs, chickens including broilers, and turkeys, were all at the lowest levels since the early 1940's. Production of eggs and broilers, and storage stocks of turkeys, were records. After mid-year egg prices picked up. By the end of September they were higher than a year earlier, and they have continued to date at prices generally more than 5 cents per dozen above last year. Present and prospective production of eggs are below 12 months earlier, and therein lies the basis for "cautious optimism."

On January 1, 1958, we are likely to have about 5 percent fewer potential layers on hand than the 371 million on January 1, 1957. This is a consequence of the 18 percent cut in chickens raised this spring (down to the lowest number since 1909), which by November 1 had been translated into a 5 percent cut in the number of hens and pullets on hand.

Total egg production through perhaps March may reflect higher rates of lay per bird, which might offset part of the reduction in numbers of layers. But during the flush production period of the spring the monthly egg output will be down from a year ago by about the same percentage as numbers of layers. A 4 or 5 percent cut in egg production at that time would result in either a reduction from recent averages in per-person egg supply, or fewer eggs for storage, or a combination of the two. Either would have the effect of holding egg prices above last spring's levels, which were in the range of 29.0-30.6 cents per dozen on the basis of mid-month U. S. average farm prices.

The prospect for higher springtime egg prices in 1958 than this year is especially good if egg prices during the winter continue relatively strong. The progressive shrink from last year in monthly egg production will improve the chances toward strong prices. My estimate, therefore, is that for the next 6 or 8 months the U. S. average farm price of eggs will average 5 cents per dozen higher than a year earlier. This is about the same margin as occurred in mid-October, when this year's price to farmers was 43.0 cents per dozen.

Such a price development, combined with the cheaper feed prices that poultrymen are already paying, will provide a much more favorable situation for egg producers from now through the hatching season. As a result, they are likely to raise more replacements in 1958 than the low number of 394 million in 1957. But this increase may be on the order of 5 percent.

The reasons for expecting only a modest increase in the number of replacement chickens raised in 1958 is the history of egg prices in 1954 and 1956. In both of these years practically no seasonal price increase occurred in farmers' average egg prices, and egg prices averaged lower than in the preceding year. Evidently many farmers gave up egg production entirely after the experience of these 2 years. Some of them are likely to remain out of business, or at least not to re-enter on a large scale.

Some poultrymen have retained their flocks at or near their accustomed level since 1954-55, despite the net drop of 23 percent since then in chickens raised, and a drop of 9 percent in potential layers. These poultrymen probably felt considerable pressure to keep their flocks up to a level that will permit the highest practicable production efficiency and income. Therefore, conceivably, this class of operator may not greatly alter his scale of operation after only one favorable year.

This leads to the expectation of a rather subdued production response to the higher egg-feed price ratio that is expected in the next 6 to 8 months (compared with last year), because even after the prospective increase the ratio will be only about average. And such a subdued response would lead in turn to per-person egg supplies--and probably prices too--in the last half of 1958 being about the same as in 1957.

The smaller-than-usual proportion of pullets in the present laying flock is one of the explanations why a small increase in the number of chickens to be raised can be absorbed next fall without upsetting effects upon supply and price. The reduction from average in the number of 1957-hatched layers will extend into the fall of 1958, when it will be reflected in a reduced number of 2-year-old hens in the laying flock. Offsetting the shortage of hens, there will be room for upwards of 15 million more young pullets, without creating a net addition in the laying flock. In that fact lies a considerable part of my basis for cautious optimism on the egg outlook for the last half of 1958.



For broilers it is a different story. Production this year will be record large, probably about 6 percent larger than the 1,345 million birds of 1956. Output in 1958 is likely to increase again, perhaps by as much as the 1957 percentage of increase. Prices in 1958 are not likely to average much different from 1957, when the average price at the farm level will be about 19 cents per pound.

The organization of the broiler business helps to explain why the industry can continue to make consistent gains in volume in the face of what superficially seems to be a discouraging basis for expansion. Contractual arrangements as used in broiler production relieve the grower of much of the price risk of the enterprise, and at the same time commit the financier to a steady rate of production. As a consequence, broiler production no longer drops down as a matter of course when prices drop.

Every new appraisal of the broiler industry reveals additional economies, shortcuts, and efficiencies which tend to cut costs, but these have probably not been rapid enough to hold the profits from growing broilers at the pre-1956 levels. For 1956 the broiler-feed price ratio was 4.0 and for 1957 it will likely be 3.8 or 3.9. These contrast with 5.0 for 1951-55.

The 1958 turkey crop is likely to be down from the 1957 record of 80.6 million birds. This large crop is selling at the lowest prices in 15 years--in mid-October, 22.3 cents at the farm level, against 25.9 cents last October. October 1 storage stocks of 150 million pounds were 50 percent above a year earlier.

These large storage stocks will be the dominant influence upon turkey prices in early 1958. But prices in the last 4 months of 1958 are likely to be higher than this September-December if a moderate cut of 5 to 10 percent is made in production.

The early indications so far available suggest such a cut, to be accomplished mostly among light-breed turkeys and white-feathered heavy birds. The late 1958 price outlook would be considerably strengthened if later indications showed trends for Bronze turkeys to be falling in line with other turkeys.

These preliminary indications are admittedly sketchy, and not yet conclusive, but a general downward direction is indicated by recent hatchings and egg settings, by pullorum testings, and by an October 1 survey of farmers' intentions to keep breeder turkeys.

The outlook as I see it and have just described it would add up to a slight increase--perhaps 3 percent--over the 3.2 billion dollar gross income expected from eggs, chickens, and turkeys in 1957. But the effects on net income of poultrymen will be considerably greater, as you can deduce from the expectation that price increases--not volume increases--will be the principal basis for the increased gross. Since the volume of production (except for broilers) is not likely to increase, requirements for production factors will not rise in proportion to gross income. Also feed prices are likely to average below 1957, so you can see that things may look up in 1958 for poultrymen--especially egg producers--if they remain restrained in their production responses to the emerging situation.

1991





UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Marketing Service  
Washington 25, D. C.

THE OUTLOOK FOR FATS, OILS, AND OILSEEDS IN 1957-58  
Statement presented by George W. Kromer  
at the 35th Annual Agricultural Outlook Conference  
Washington, D. C., November 20, 1957

The outlook for food fats and oils in the 1957-58 marketing year is dominated by larger supplies than a year earlier of all major food fats except cottonseed oil. Smaller beginning stocks on October 1, 1957 than a year earlier are expected to be more than offset by increased output during the year.

The total supply of food fats in 1957-58, based on current estimates of oilseed crush and soybean exports, is forecast at about 11.8 billion pounds compared with just under 11.7 last year. In addition as much as 50 million bushels of soybeans (equivalent to about 550 million pounds of oil) in excess of probable market outlets will be available and are likely to remain on hand next September 30. Prices of the major food fats--excluding butter--are likely to average somewhat lower than in the past year.

Exports have become an increasingly important market for food fats and oils. During the last two decades, U. S. production has increased more sharply than domestic use. As a result, large quantities have become available for export. Exports of food fats and oils, including the oil equivalent of oilseeds exported, in 1956-57 were equal to about 27 percent of domestic production. Export prospects in 1957-58 again will be of major importance as exportable supplies will be somewhat larger than last year.

Present indications are that exports of food fats and oils (including the oil equivalent of soybeans) through September 1958 may be a little less than the record 2.9 billion pounds shipped abroad in the year just ended. The movement abroad will be encouraged by lower prices than in 1956-57 but will be dependent in a large measure on Government programs which enable foreign nations to use their own currency to purchase fats and oils in the U. S. Exports of edible vegetable oils under Public Law 480 in 1957-58 will approximate or possibly exceed last year's 549 million pounds. However, exports financed by the ICA and regular commercial sales may both be below the 1956-57 levels. Total exports of edible oils are currently estimated at about 1,100 million pounds compared with 1,230 million last year.

Competition in world markets will be keener than in the two preceding marketing years as exportable supplies in several countries will be larger during 1957-58. Preliminary estimates indicate bumper crops of peanuts in Nigeria, French West Africa and India for harvest this year. The total Mediterranean olive crop is expected to be somewhat larger than a year earlier, with sizable increases in Italy, Greece and Portugal.

Reduced production of olive oil is likely in Spain, Turkey and Morocco. The 1957 rapeseed crops in Canada and Western Europe are up materially. Also, with strong anti-inflationary measures being taken in many countries of Western Europe as well as in Japan, consumer incomes abroad may not increase as rapidly in 1958 as in most recent years. While current prospects point to lower exports than last year, any significant changes in estimates of foreign oil crops or in international developments could materially affect the demand for U. S. fats, oils, and oilseeds.

Now let us look at the individual commodities.

Supplies of soybeans for the 1957-58 marketing year are estimated at 500 million bushels, at least 40 million more than last year's record. Strong domestic and export demand for edible vegetable oils and protein feeds will encourage a heavy crush of soybeans in 1957-58 which may total around 325 million bushels, well within the estimated 370 million bushel capacity of the industry. A crush this size would be nearly 10 million bushels above last year and would produce 3.6 billion pounds of crude soybean oil and 7.7 million tons of soybean cake and meal.

Soybean exports (as beans) in 1957-58, following the uptrend of recent years, are expected to approximate 90 million bushels compared with 85 million for the season just ended.

Estimated seed requirements (including feed, other uses and loss) for the large acreage expected for the 1958 crop may total about 35 million bushels.

If estimates of requirements for crushing, export and other uses should prove substantially accurate, the carryover stocks of soybeans on October 1, 1958 might be as much as 50 million bushels. A substantial share would be in the hands of CCC.

Soybean farm prices during most of the 1957 harvesting season probably will average near the loan level, as the support price tends to set a floor under the market. The loan level is slightly less than the national average support price of \$2.09 per bushel. Because total supplies are very large and marketings have got underway more slowly than usual, the seasonal upswing in soybean prices will be limited. Only a modest late winter price rise, at most, can be expected unless the fats and oils picture should change significantly. Prices next spring and summer will depend to a considerable extent on the size of competing foreign crops, the prospects for domestic crops in 1958, and on international developments.

Present indications are that prices of soybean oil, as of other food fats, during the 1957-58 marketing year will average somewhat less than in 1956-57, because some of the demand-strengthening factors are lacking this year. Soybean meal prices last feeding season sagged considerably to the lowest level in a decade. Prospects are that soybean meal prices this fall and winter probably will not differ significantly from the average of last season.

Soybean acreage is expected to remain large in 1958 and if the harvested acreage is about the same as this year (restrictions on corn, wheat, and cotton will continue in 1958) and growing conditions and yields are as favorable as in recent years, the soybean crop would total around 475 million bushels.



If the 1958 crop of soybeans should be of this size and if carryover stocks reach 50 million bushels, total supplies would be about 525 million bushels. Assuming farm uses at 30 million bushels, about 495 million bushels would be available for crushing, export or carryover. This compares with about 470 million in 1957-58.

Price support for soybeans is discretionary with the Secretary of Agriculture. No announcement as to support for the 1958 crop has been made.

Cottonseed output in 1957 is estimated at 4,852,000 tons, nearly 11 percent less than last year and the smallest since 1950. Although the acreage for harvest was down about 12.4 percent, yields per acre are up slightly from last year.

Prices to farmers during the 1957-58 season are being supported at \$42 per ton (purchase price, basis grade 100), \$2.1 less than last year. Farm prices are expected to average near last year's level and above support. Lower quality of the seed this year is a factor tending to offset the price effect of the smaller supply. Cotton oil prices this fall and winter probably will average near a year earlier but are likely to be relatively more stable. They would be maintained by low carryover inventories, lateness of the 1957 crop, a relatively strong demand for cotton oil, and the purchase of sizable quantities of edible oils for export under P. L. 480. Large supplies of competitive soybean oil at lower prices, however, may tend to check any significant rise in cotton oil prices. Cottonseed meal prices this fall have averaged at the lowest level in a decade, reflecting bigger supplies of other feeds and better pastures in the South. Prices in 1957-58 may average somewhat lower than last year.

The Secretary of Agriculture on October 11 proclaimed a national marketing quota of 11.9 million bales of cotton for the 1958 crop and a national acreage allotment of 17.4 million acres, the same as the national allotments for 1956 and 1957. However, under provisions for State allotments, the State totals are 17.6 million acres. A growers' referendum on the 1958 quotas will be held on December 10, 1957. At least two-thirds of the farmers voting in the referendum must approve quotas before they may be made effective. With The Acreage Reserve again in operation, the acreage would be less than the allotment. However, yields per acre have been running above previous averages.

Domestic flaxseed supplies during 1957-58 will be tight as production from the 1957 crop dropped sharply and stocks are low. Output of flaxseed is indicated at 27 million bushels, slightly more than half the 1956 output. Infestation of aster yellows in the important producing States of Minnesota and the Dakotas sharply reduced yields per acre.

Supplies of flaxseed in the 1957-58 marketing year (including the flaxseed equivalent of linseed oil) are estimated at nearly 52 million bushels, compared with 60 million last year. This year's supply includes stocks of 24.5 million bushels (including the flaxseed equivalent of linseed oil), the majority of which was held by CCC

Domestic oil use may be equivalent to about 26 million bushels of flaxseed, and another 4 million will be needed for seed and feed. With early season exports (CCC sales) of 9 million bushels of flaxseed and 4 million bushels equivalent of linseed oil, carryover stocks of flaxseed and linseed

117

oil on July 1, 1958 probably will be less than the relatively small commercial carryover of the current season

With poor quality a handicap, farm prices for flaxseed are expected to average only slightly above the \$2.99 per bushel received last season and the support price of \$2.92. Linseed oil prices in mid-November were 12 percent above a year earlier, and are likely to continue so. They may even increase further.

Exportable supplies of flaxseed and linseed oil from other countries in 1957-58 may total around 55 million bushels. This is well above last year but at about the average of total world exports in the 3 preceding years (1953-55) when U. S. shipments abroad were large.

If plantings of flaxseed in 1958 are unchanged and growing conditions normal, the flaxseed crop would be nearly 50 million bushels, about 15-20 million bushels more than commercial use. However, recurrence of disease loss would reduce the crop below this figure.

The wheat allotment for 1958 is the same as for 1957. However, disappointing yields for flaxseed for most growers in the Dakotas and Minnesota may discourage some farmers from producing flaxseed in 1958. On the other hand, relatively strong flaxseed prices at planting time would be an incentive to expansion.

Lard output in 1957-58 is estimated at close to 2,750 million pounds, up around 125 million from last year. Prices through most of the marketing year probably will remain under a year earlier. Current prospects indicate lard exports may not differ significantly from the 590 million pounds shipped abroad last year. Little lard is likely to move out under P. L. 480 programs in 1957-58.

Lard output in 1958-59 probably will increase 8-10 percent, based on prospects for rising hog production. In such a case, lard prices in the fall and winter of 1958-59 probably would be appreciably lower than in late 1956 and 1957.

Inedible tallow and grease output in 1957-58 is forecast at 3.0 billion pounds, the same as in the year just ended. Prices in 1957-58 will depend to a large extent upon export demand. Consumption of inedible tallow and grease in soap probably will continue to trend downward but usage in animal feeds and "other" industrial uses is likely to expand.

The outlook for the 1957 tung oil crop is the most favorable in recent years. Output probably will be somewhat larger than a year earlier as the tung orchards were not as seriously hit by early spring freezes this year. Preliminary estimates indicate a crop of about 35 million pounds of tung oil. Domestic use in recent years has levelled off at about 50 million pounds. Stocks of tung oil on November 1, 1957, the beginning of the new marketing year, are estimated at 23 million pounds, of which 15 million are CCC, compared with 13 million a year earlier. During the marketing year just ended there has been little price incentive for producers to redeem loans.

Tung oil imports are restricted by Presidential Proclamation and the quota for the period September 9, 1957-October 31, 1958 is set at 26 million pounds.



UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Marketing Service

THE OUTLOOK FOR FEED IN 1958 ✓

Statement presented by Malcolm Clough, at the  
35th Annual Agricultural Outlook Conference,  
Washington, D.C., November 21, 1957

Feed supplies for 1957-58 have again set a new record high. The 1957 growing season was favorable for both feed grains and forage crops. Total supplies of feed grains and other concentrates, which reached 200 million tons for the first time in 1956, increased another 7 percent to a record 214 million tons for the 1957-58 season. This is the fourth successive year of record supplies. These big supplies have resulted from a series of generally favorable growing seasons and steadily mounting stocks. All of the increase in stocks has been under the Government price support programs as "free" stocks have been comparatively stable in recent years.

A record supply of hay also is available for the 1957-58 season and pastures this past summer and fall generally have been the best in recent years. Supplies of both forages and feed grains are much better distributed by areas this year than in any of the last 4 or 5 years. Drought areas in 1957 were comparatively small--being confined largely to the eastern States and local areas of the Southwest.

Feed grain production has exceeded total domestic consumption and exports in each of the past 5 years. The average annual rate of excess has been about 5 million tons or about 4 percent. While this does not appear large, the accumulative effect has been to increase total stocks from 20 million tons in 1952 to 47 million in 1957. The record 1957 production of feed grains totaling 140 million tons is expected to exceed 1957-58 disappearance by an even greater margin. Domestic consumption is expected to be a little heavier in 1957-58 than last year and exports of feed grains are expected to continue near the high rate of the last 2 years. Even with this heavier disappearance a further increase of around 10 million tons in carryover stocks into 1958-59 is in prospect, which would raise the total carryover to around 57 million tons.

Not only are feed concentrate supplies ample for this season, but the big carryover in prospect for next year practically assures adequate supplies for 1958-59 as well. A carryover of around 57 million tons would provide adequate feed concentrate supplies even if the 1958 growing season should be the poorest in 50 years.



A number of factors have contributed to this overproduction of feed grains: (1) much of the surplus land taken out of wheat and cotton production has been diverted to feed crops, (2) improved techniques in feed grain production have made possible a substantial increase in the output per acre of land over the past 2 decades and (3) increased efficiency in converting feed to livestock and livestock products is making it possible to get greater output of livestock products per ton of feed.

Increasing stocks of corn have accounted for much of the build up in total feed grain stocks. Corn production has exceeded disappearance in each of the past 5 years in spite of declining acreage. Corn acreage has followed a long term downward trend during the past 25 years. Influenced by the acreage allotment and the Soil Bank acreage reserve programs, the decline has been sharper in the past 2 years with the acreage planted dropping about 7.5 million acres from 1955 to 1957. About 5 million acres of this was in the Corn Belt. But, with a record yield per acre, the 1957 crop of 3,333 million bushels was the third largest of record and about 100 million bushels above production 2 years ago. This, plus the record carryover, adds to a total supply of 4,690 million bushels, a little above the record 1956-57 supply and a fifth larger than the 1950-54 average. The 1957 crop is expected to exceed total utilization by around 100 million bushels, leaving a carryover into 1958-59 of over 1.4 billion bushels, the bulk of which is expected to be under loan or owned by CCC.

Supplies of oats, barley and sorghum grains all increased from 1956 to 1957. Oats is the only feed grain not in record supply this year. The sharpest increase was in sorghum grains. The 1957-58 sorghum grain supply exceeds barley in total tonnage for the first time. The 1957 sorghum grain crop of 527 million bushels, is more than double the previous record production in 1955 and 3 times the average in 1950-54. The big crop this year reflects the record 18 million acres harvested for grain, an unusually favorable growing season, more land under irrigation and expanding use of new hybrid varieties. These developments point to generally bigger crops of sorghum grains in the future, though recurrence of bumper crops such as that of 1957 probably will be more the exception than the rule. Large quantities of sorghum grains and barley are being placed under price support and very large stocks of these grains are expected to be carried over into 1958-59.

The total supply of high protein feeds has increased steadily over the past 20 years, principally as a result of expanding production of soybean meal. Soybean meal now makes up over half of the total tonnage. The total high protein feed supply for 1957-58 is expected at least to equal the large supply of last year. Production of soybean cake and meal may be a little larger than last year's record output of 7.5 million tons, while smaller production of cottonseed and linseed meal is in prospect. Supplies are expected to be near record both in total and per animal unit.

The price of corn and other feed grains have declined this summer and fall with the harvesting of the big 1957 crops. In October prices received by farmers for feed grains averaged 12 percent lower than last year. The level of feed grain prices is expected to continue lower than last year at least through the winter and spring, as a result of the larger 1957 crops and lower price supports. In 1956-57 feed grain prices made practically no seasonal gains during the marketing year. Again this year there probably will be less than the usual seasonal rise in the general level of feed grain prices from this fall to next spring and summer.

The national average support rate for 1957 corn is \$1.40 per bushel for producers in the commercial area complying with their acreage allotments, and \$1.10 for noncompliers. Since a comparatively small percentage of the farmers in the Corn Belt are eligible for the \$1.40 per bushel support, corn prices probably will average somewhat lower this coming winter and spring than the average of \$1.21 per bushel in that period of 1956-57.

Prices of feed grains and high protein feeds have declined during the past 2 or 3 years, but high protein feed prices, particularly soybean meal, have declined more rapidly. Soybean meal prices at Chicago averaged \$25 per ton above the price of No. 3 Yellow corn per ton during the period 1952-54. The sharp decline in soybean meal since 1952-53 reduced this difference to only about \$10 to \$15 during the past year. The difference is even less if the price of soybean meal is adjusted for the cost of bags, which currently averages about \$4.50 per ton of meal bagged. Soybean meal prices are at about the same level this fall as last. In 1957-58 they may average about the same as in 1956-57. While another big supply of soybean meal is in prospect for 1957-58, livestock prices are a little higher than a year ago and livestock production is expected to increase, which will help to maintain soybean meal prices.

While prices of most feeds are lower this fall than last, greatest decline has been in sorghum grains. The average price received by farmers in mid-October of \$1.43 per 100 pounds was 64 cents lower than a year earlier and 46 cents per 100 pounds below the mid-October price of corn. Prices of sorghum grain probably will increase this winter and spring after the big 1957 crop is harvested and moved into storage, but they will continue as a cheap feed in many areas.

187





UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Marketing Service

THE OUTLOOK FOR FOOD IN 1958

Statement presented by Harry Sherr at the  
35th Annual Agricultural Outlook Conference,  
Washington, D. C., November 20, 1957

The phrase "little different from 1957" probably best describes the general food situation in prospect for 1958. Supplies are expected to be close to the high level of 1957, and the domestic demand for food will likely remain strong. Civilian consumption of food probably will about equal the 1957 high per capita rate, exceeding the prewar (1935-39) average by 12 percent. Retail food prices are likely to average a little higher than a year earlier until perhaps mid-1958.

Strong consumer demand for food next year is expected to be sustained by the continued high level of consumer income in prospect. Economic activity and employment close to the 1957 record level is probable. Consumer expenditures for food will likely total a little higher than indicated for this year. The higher level of average food outlays will be due mainly to the larger population and the slightly higher food prices during at least the first half of the year.

The forecast of slightly higher than year-earlier food prices reflects not only the continued strong demand for food and the slightly smaller supplies, but also the expectation of a little higher average marketing charges for food than in 1957. Most of the increase in marketing costs are likely to be passed on to consumers.

Food supplies available to civilians next year probably will differ little from the 1957 near-record high total. Carryover stocks of food next January 1 will be substantial and, if weather is average, food crop production in 1958 will be large. The number of livestock on farms and ranges at the beginning of the year will be close to that of last January 1, and the large supplies of feed grains will contribute substantially to keeping output of livestock products at a high level.

About as large a volume of meat will be available to consumers next year as in 1957, according to present prospects. The composition of the supply probably will differ slightly, with pork likely to be a little more plentiful and both beef and veal slightly less so. Retail prices of meat may average a little higher than in 1957, with the difference narrowing after mid-1958 as hog marketings increase seasonally. Civilian consumption of meat per person next year may be a shade below the 1957 rate, but will likely be higher than in most of the years from 1900 to 1955.

The slightly smaller output of beef and veal in prospect for 1958 will reflect mainly the likely reduction in the number of cattle and calves marketed for slaughter. The effect of this will to some extent be offset by somewhat heavier average slaughter weights than in 1957. Abundant lower-priced feed grains and prospects of a strong demand for beef will encourage farmers to feed cattle to heavier weights. Another consequence of heavier weight slaughter cattle next year would be a higher proportion than in 1957 of better grades of beef, most of which reach consumers as red meat cuts.

The expected increase over this year in pork supplies will likely be much greater in the second half of 1958 than in the first half. The 3 percent larger fall pig crop this year than in 1956 indicates more pork for consumers next spring and early summer than in the same part of 1957. Reports from 10 important States indicate that in September farmers there planned to have 7 percent more hogs farrow this December-February than last. The total 1958 spring pig crop--the most important one of the year--may be up by at least as large a percentage. Spring-crop pigs are marketed from late summer through about mid-winter.

Continued large supplies of milk and dairy products are expected in 1958. Total stocks of dairy products will be much higher this January 1 than last, with the increase likely to be almost entirely in Government-owned stocks. Milk production on farms may exceed by 1 to 2 billion pounds the record total of 127 billion estimated for 1957. The increased output is expected to reflect higher milk output per cow; dairy cow numbers may be no greater than this year.

Civilian consumption of dairy products in 1958 is expected to be close to this year's per capita rate, with shifts for most of the individual items likely to be slight. The Special Milk Program will continue to provide an important outlet for fluid milk next year even though the percentage increase may not equal those of the recent past when participation in the program was expanding rapidly. Retail prices of milk and dairy products are expected to differ little from those of the present year, with any changes likely to be mainly the result of adjustments in gross processing and marketing costs, unless the price-support level is altered.

Compared with this year, more chicken meat but fewer eggs and less turkey meat are in prospect for 1958. The increase in chicken meat is expected to come largely from commercial broilers. Lower feed prices next year are likely to encourage expanded production of commercial broilers and have a moderating influence on a probable reduction in the number of turkeys raised. Because of the 5 percent fewer layers expected to be on hand this January 1 than last, egg production will likely remain lower than this year at least until mid--or late--summer. The volume of "flock-replacement" chickens raised in 1958 will determine whether supplies next fall will equal or exceed those of this fall.

Civilian per capita consumption of chicken meat next year will likely be record high, exceeding somewhat the estimated 1957 rate, while the rate for turkey meat may be second to this year's record level. Consumption of eggs per person may be moderately lower next year, and at the lowest rate since 1942. Retail prices of poultry meat in 1958 may average close to this year's level, while those of eggs will average higher.

Food fats and oils will continue in heavy supply during the coming year, probably a little larger than in 1957. The probable increase will be due to somewhat greater output of lard and vegetable oils. Exports of edible fats and oils will be encouraged next year again. Retail prices of these food products are expected to average close to those in 1957. Civilian consumption of food fats and oils in 1958 is expected to average around 44 pounds (fat content) per person, about the same as this year's rate.

Abundant supplies of food grain will be available in the year ahead. Per capita consumption of cereal food products in 1958 may be no greater than in 1957. Retail prices of these food products will likely average a little higher than in 1957, reflecting slightly increased marketing charges.

Supplies of processed fruits and vegetables through next spring, when the present marketing season ends, will continue large but not quite equal to the heavy volume available in the same months of 1956-57. However, current supplies are adequate to maintain civilian per capita consumption of these products in the months ahead at the year-earlier rate. More fresh deciduous fruit will be available next winter and spring than last, and current indications point to larger supplies of fresh citrus. For fresh vegetables indications for winter supplies are not yet available. If weather conditions are average, supplies this winter will be at least moderately larger than the relatively small ones of last winter. Supplies of potatoes through the winter months will be smaller than the burdensome ones of last winter, but still more than sufficient to permit civilians to consume potatoes at the year-earlier per capita rate.

Military procurement of food next year may be no larger than in 1957. Food exports may be down a little since world food supplies will likely be larger than a year earlier, and a little better distributed, geographically.

195





UNITED STATES DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE

\* THE OUTLOOK FOR FRUITS AND TREE NUTS IN 1958 \*

Statement by Ben H. Pubols,  
Agricultural Economic Statistician,  
at the 35th Annual Agricultural Outlook Conference,  
Washington, D. C., November 20, 1957

Trends in the Fruit Economy

Perhaps a clearer perspective of the outlook for fruit in 1958 may be had by observing first some of the trends in the fruit economy over the past 2 decades. From the level of 1935-39, production of all fruits combined has increased about one-third. Practically all of the increase was in citrus fruits, which doubled production. For noncitrus fruits, the level of recent years was about the same as that for 1935-39.

Among citrus fruits, total production of oranges has more than doubled since 1935-39. In Florida, production has trended sharply upward to a level 4 times that of 1935-39. In California, production increased to 1944-45, then declined, giving way to other uses of the land. Production of grapefruit in Florida also has trended sharply upward. But in Texas, after increasing to the late 1940's, it became very light as the result of disastrous freezes. Consequently, total production has been much smaller than in the 1940's. With heavy postwar plantings bearing fruit, especially grapefruit in Texas and oranges in Florida, production of these two fruits is expected to trend upward over the next few years.

Among deciduous fruits, production trends also have varied over the past 2 decades. Trends have been up for sour cherries, plums, nectarines and cranberries, but down for apricots and prunes. For peaches, pears, grapes and sweet cherries, production trends were up during the early years of the past 2 decades, then level or down. For apples, the trend has been down, then level, and for strawberries down, then up. For most of these fruits the trends of the recent past probably will continue over the next few years. Total production probably will not change much from the level of the recent past.

Utilization of citrus fruits over the past 2 decades has been marked by an increase in fresh use until the mid-1940's, then a decline. But it also has been marked by a sharp increase in use for processing, first for canned juice, then for frozen concentrates. The most striking change in the use of citrus over the past decade was the strong upsurge in the use of oranges for frozen concentrates, which in Florida now takes over half of the orange crop. Use of citrus fruits for processing, which took about 55 percent of the 1956-57 crop, is expected to continue to trend upward.

Use of deciduous fruits over the past 2 decades has been marked by a small downward trend in the amount used fresh and by an offsetting upward trend in the amount processed. In processing, increases in use of fruit for canning and freezing offset a small decline in output of dried fruits. In 1955 and 1956, an average of about 39 percent was used fresh and 61 percent processed. Over the next few years, fresh use may decline further and use for canning and freezing increase.

Per capita consumption of fresh and processed citrus, fresh basis, increased from about 51 pounds in 1937 to 87 pounds in 1956. In contrast, consumption of noncitrus fruits dropped from 141 to 110 pounds. For both classes of fruit, consumption of fresh fruit declined while that of processed increased. Since 1951, consumption per capita of all fruits combined on a fresh weight basis has varied closely around 200 pounds. But total consumption has increased with the rise in population.

## 1957 AND 1958 SEASONS

### Supply and Demand Prospects

Supplies of fresh and frozen fruits and canned fruit juices are expected to be somewhat larger this fall and winter than in this period of 1956-57. Supplies of canned fruits and frozen fruit juices probably will be much the same as a year earlier. But supplies of dried fruits and tree nuts are expected to be smaller. With prospects for continued high consumer incomes in 1958, consumer demand for fruit probably will remain fairly stable.

### Export Outlook

The world demand for fruit during the 1957-58 marketing season should be equal to or slightly better than that of 1956-57. In West European countries, some trade restrictions have been liberalized. Because of a very short deciduous fruit crop in Western Europe, increased exports of apples and pears to Europe are expected. There also may be some increase in exports of canned deciduous fruits. The smaller deciduous fruit crop in Europe will also tend to increase the demand from that area for citrus fruit, though this may not have a very appreciable effect on U. S. exports of oranges because of prospective larger supplies in the Mediterranean area. But exports of processed citrus probably will continue to trend upward. Foreign production of raisins is down considerably from the large output in 1956-57, and production of dried prunes, though larger than in 1956-57, is still below average. Despite strong foreign demand for raisins, U. S. exports are expected to be down as a result of the short output in the United States this year.



## Citrus Fruit

Although production of oranges and grapefruit is expected to trend upward over the next few years, production in 1958-59 may not be greatly different from the prospective large crops in 1957-58.

The 1957-58 crop of early and mid-season oranges (as estimated October 1) is about 3 percent larger than the 1956-57 crop and 26 percent above the 1946-55 average. A sharp reduction in California is more than offset by increases in other States, especially Florida which has a record crop. The new crop of tangerines in Florida is down 6 percent from the 1956-57 crop. Early-season indications for the 1957-58 crop of Florida Valencias point to a crop about 11 percent above the 1956-57 crop. In California, prospects for the new Valencia crop are less favorable than a year ago.

The 1956-57 pack of frozen orange concentrate in Florida set a new record, and a further increase in output seems probable in 1957-58. Output of canned single-strength orange juice in Florida in 1956-57 also was a little larger than in 1955-56, and another large pack in 1957-58 seems likely. Florida packers' stocks of frozen orange concentrate this fall are a little smaller than a year ago, but those of canned orange juice are much larger.

The 1957-58 grapefruit crop (excluding the California summer crop) will be about 5 percent larger than the 1956-57 crop, according to early-season indications. Prospective production is up in all States, with much of the increase in Texas. With total production larger and harvest starting earlier this season than last, shipments to fresh markets probably will be up somewhat in 1957-58. But there may be no great change in the volume processed. In Florida, carryover stocks of canned grapefruit juice are much larger this fall than last.

Prospective production of lemons in 1957-58 is somewhat smaller than the large 1956-57 crop.

## Deciduous Fruits

The 1958 crop of deciduous fruits probably will be a little larger than the near-average 1957 crop, assuming average weather or better. This envisages increases in the crops of apricots, grapes, peaches and sweet cherries; decreases for apples, sour cherries and strawberries; and not much change for other fruits.

Total production of deciduous fruits in 1957 (as estimated October 1) was about 2 percent smaller than the 1956 crop and 3 percent under the 1946-55 average. Most of the reduction in 1957 was in crops harvested early in the season. Among fruits that will continue to be marketed this fall and winter, the commercial apple crop is up 13 percent over 1956, and that of cranberries is up 8 percent. Production of apples is up considerably this year in States, especially Washington and some of the northeastern States,

105

that store a large portion of the crop for sale in winter and spring. Production of fall and winter pears, which provide the main supply of fresh pears after January 1, is 1 percent larger than last year.

The 1957 pack of frozen fruits and berries (excluding juices) is expected to be a little larger than record 1956 pack. Output of frozen cherries is record large, but the pack of frozen strawberries is indicated to be somewhat below the record in 1956.

Current indications are that the 1957-58 pack of canned deciduous fruits will be somewhat smaller than the record pack in 1956-57. The new pack of canned peaches is down considerably from 1956-57, and that of fruit cocktail is moderately smaller. In contrast the packs of sweet and sour cherries are up sharply, but they represent only a relatively small part of the total pack. With carryover stocks up, total supplies of canned fruits will be about as large as a year ago.

Dried fruit production in 1957-58 is expected to total considerably under that of 1956-57. Heavy decreases are indicated for both raisins and dried prunes, which usually comprise most of the total.

#### TREE NUTS

Total production of tree nuts has increased about 80 percent since the mid-1930's. In 1958, production is likely to be larger than the near-average 1957 crop. With lighter production of almonds and pecans more than offsetting heavier crops of filberts and walnuts, total production in 1957 is about 15 percent smaller than the record 1956 crop.

:  
: This represents mostly the highlights of the 1958 Outlook issue of :  
: :  
: "The Fruit Situation" for October 1957, :  
: :  
: a processed publication issued by the :  
: :  
: Agricultural Marketing Service :  
:

OUTLOOK FOR HOUSING, HOUSEFURNISHINGS AND EQUIPMENT IN 1958

by  
Arnold E. Chase, U. S. Department of Labor  
before the  
Agricultural Outlook Conference  
Washington, D. C., November 20, 1957

Over one million new nonfarm dwelling units will be started in the United States this year. Through October 840,000 private and 40,000 public units had been placed under construction. A large proportion of the new public units were in "Capehart" military housing. As you probably know, there are no current reports on the number of new farm houses built.

Offhand, a million new homes in one year seems like a large number. It does, in fact, represent a very respectable homebuilding year. Why, then, do we hear talk about the slump in housing starts during 1957? One reason is that there recently have been much better years, and another is that this rate will not permit any significant improvement in our housing standards.

As recently as 1955, construction was started on a total of 1,330,000 new nonfarm dwelling units, and in 1950 the number was nearly 1,400,000 units. Over the last 10 years, housing starts have averaged about 1,120,000 units annually. They have been above one million every year since 1949 (table 1). In contrast with some of these past records, the rate of operation in the homebuilding industry this year has been disappointing to homebuilders and to others who would like to see a real beginning made on replacing the millions of substandard dwellings in our existing housing stock.

The scarcity of mortgage funds has received the major share of blame for the slow-down in homebuilding which began in the last half of 1955. While there seems to be little doubt that this is the factor most immediately responsible, we should not overlook the fact that the homebuilding industry has many other problems to solve before it will be in a position fully to exploit its potential market and to provide decent housing for all American families. Indications are, however, that the availability of mortgage funds will continue to be the major limiting factor on homebuilding in 1958 and, therefore, that the industry's other problems still will not come to the fore next year.

To place 1958 in perspective, it may be helpful to take a brief look at the forces operating in the housing market and their longer-range implications.

Household Formation and Dwelling Units, 1950-1957

We have heard a great deal about the high marriage rate during and since World War II and the trend toward earlier marriages. The current rate is about 1-1/2 million marriages a year. We are less familiar with the high

207



rate of dissolution of existing marriages by death of one of the spouses and other causes. It is something of a surprise, therefore, to note that there was a net increase of less than 3 million in the number of married couples during the 7-year period from March 1950 to March 1957, according to Census Bureau figures.<sup>1/</sup>

With prosperity, however, many of the surviving partners of dissolved marriages apparently have continued to maintain their own households. Divorces sometimes result in the creation of an additional household. There also has been a tendency for unmarried individuals to establish their own households. The availability of housing together with higher incomes also have permitted the undoubling of secondary and subfamilies. In April 1947, when the housing shortage was critical, nearly 3 million married couples (8.7 percent of the total) were without their own households.<sup>2/</sup> By 1950, the number had been reduced to just over 2 million and, in March 1957, it was down to 1-1/4 million which, at 3.3 percent of the total, probably represents about a minimum, since there will always be some married couples living doubled-up for one reason or another.

The net result of these various trends was an increase of 6 million in the total number of households during the 7 years from 1950 to 1957, with married couples (including those that undoubled) contributing only 60 percent of the total. It is clear, therefore, that factors other than the marriage rate and family formation as such have had a major influence on the basic demand for housing during this period. Unfortunately for those who attempt to prognosticate future housing demand, it appears likely that these less predictable factors will continue to operate in the years immediately ahead.

Preliminary estimates indicate that our housing stock was increased by about 9 million dwelling units between April 1950 and December 1956.<sup>3/</sup> This was the net result of additions from new construction and conversions which were offset in part by losses from the housing supply through demolition, disasters and other causes. The margin of about 3 million in additional dwelling units over the net increase in households during this period has produced some increase in the vacancy rate which permits our population to satisfy its desire to migrate and move about within areas frequently. There also has been an increase in the number of seasonal dwellings which, in some cases at least, probably reflects a trend that may become important in the future toward the "two-house" family.

Since the downturn in new homebuilding, the vacancy rate has stabilized, remaining virtually unchanged through the first three quarters of this year.<sup>4/</sup> This stability in the vacancy rate suggests that the production

---

<sup>1/</sup> Current Population Reports, Population Characteristics, Series P-20, No. 76, U. S. Bureau of the Census, July 1957.

<sup>2/</sup> Ibid.

<sup>3/</sup> National Housing Inventory, U.S. Bureau of the Census.

<sup>4/</sup> Housing and Construction Reports, Housing Vacancies, Series H-111, No. 10, U.S. Bureau of the Census, November 1957.

of around 1 million new nonfarm dwellings a year plus whatever the current output of new farm houses may be is just about meeting current requirements for additional housing that arise out of net new household formation. This does not imply that the current rate of homebuilding should be considered adequate from an economic or social point of view, or that it is the maximum to be expected if mortgage funds were available on more favorable terms and if certain other problems of the industry were solved.

#### Household Formation in the Future

According to projections made by the Bureau of the Census, <sup>5/</sup> the net increase in households each year between now and 1965 appears likely to run about the same as, or slightly below the average of the last 7 years (table 2), continuing to reflect the low marriage and birth rates of the 1930's and early 1940's. Any strong upturn from the jump in marriages and births beginning in 1944 will not come until about 1965, when annual net additions to the total number of households will begin to exceed the average of the past 7 years by a wide margin.

It appears, therefore, that for the next several years the basic annual need for over-all net additions to the housing stock just to supply shelter for the population will be neither substantially greater nor less than it has been this year at somewhere around 8,000,000 units. If we accept this conclusion, we must look elsewhere for factors which might contribute to a higher rate of homebuilding.

#### Migration and Mobility

The mobility of the population has been cited as an important factor in the demand for housing. One-fifth of the population moved during the year from March 1955 to March 1956, according to Census data.<sup>6/</sup> One-third of the moves were to a different county and one out of six to a different state. The non-white population has shown more mobility than the white population since 1950. The periods of greatest mobility have accompanied spurts in homebuilding, as could be expected. Movement of the population from farms to nonfarm areas has been one of the most persistent trends. This undoubtedly has resulted in abandonment of many existing farm houses which has been one source of losses from the housing supply. In nonfarm areas so far, whenever one family moves into a new home another family stands ready to occupy the vacated dwelling in most cases. Excess vacancies appear not to have developed, except possibly for short periods, in any areas which have had out-migration, though unfortunately comprehensive vacancy data are not available currently for local areas.

It is logical to conclude, therefore, that mobility of the population has had more influence in determining where new housing would be built than it has in contributing to additional construction. Certainly, if builders gauge their markets correctly, this will be the result in the

---

<sup>5/</sup>Current Population Reports, Population Characteristics, Series P-20, No. 69, U.S. Bureau of the Census, August 31, 1956.

<sup>6/</sup>Current Population Reports, Population Characteristics, Series P-20, No. 73, U.S. Bureau of the Census, March 12, 1957.

209



future. Most of the new building is likely to continue to be in suburban areas, and the continued exodus from farms will warrant more nonfarm than farm building.

Mobility can be dismissed, therefore, as a major factor likely to cause any significant amount of additional homebuilding for the country as a whole, though it will be important for individual local areas and for some entire regions of the country. Even there it can be over-rated as a factor in homebuilding demand, as evidenced by the fact that the West which has had the largest in-migration also currently has the highest vacancy rate.

#### Relationship of Incomes to Construction Costs, Selling Prices and Housing Expense

One of the major problems confronting the residential building industry today is the same as that now faced by many other industries, i.e., the squeeze between rising costs and a price level which will retain enough of the market to permit the most economical operations. The median income of nonfarm families rose by 44 percent between 1950 and 1956 (table 3). When adjusted for the increase in the cost of living, however, the median income was up just 28 percent. Even that is a sizeable increase in the short span of just six years and would appear on its face to support a continued strong basic demand for housing.

Family incomes without some further refinement probably over-state families' ability to buy houses, however. For one thing, families have grown larger on the average and their non-housing expenses, therefore, are up more than proportionally. They also are paying more taxes. On the other hand, the 11 percent rise in per capita disposable personal income in constant (1956) prices since 1950 undoubtedly understates the increase in the relative amount that families could afford to put into housing in 1956. The correct figure would appear to be somewhere between 11 and 44 percent more family income available on the average for housing in 1956 than in 1950.

On the other side of the equation, construction costs were 20 percent higher in 1956 than six years earlier. However, this figure does not represent the whole story for the prospective home buyer. Because of the fact that larger and better-equipped houses were being built in 1956, the average construction cost of the houses actually started last year was 41 percent above the 1950 average, and the median selling price of new non-farm houses started during the first quarter of 1956 at \$14,500 was 42 percent higher than the \$10,200 median price of newly completed houses in 10 selected metropolitan areas in 1950.

Thus it appears that the prospective homebuyer was no better able to buy the kind of house being built in 1956 than he had been in 1950 to buy the kind of house built then, in spite of the increase in incomes over this period. In fact, another approach suggests that the pricing of houses was better fitted to incomes in 1950 than it was in 1956.

A distribution of incomes matched with a distribution of selling prices for new nonfarm houses indicates that builders were under-building lower-priced houses in both 1950 and 1956 (table 4) on the basis of the rule-of-thumb that purchase price should not exceed about 2-1/2 times the income



of a house purchaser. In 1950 the deficiency was made up by over-building in the middle price range. Building in the top price range appears to have been balanced with incomes in 1950, but not in 1956 when 44 percent of the new houses were priced at \$15,000 or more and only 33 percent of the families had incomes of \$6,000 and up which would qualify them to buy houses in this price class.

Homebuilders today are faced with the same merchandising dilemma as many other consumer durable producers. With the housing shortage over, they can interest prospective customers enough to expand the market only by offering a new and superior product. With costs as they are, this results in a price too high for the mass market, so that builders lose customers either way. Until ways are found to reduce costs and prices on houses which will still be attractive to prospective buyers, the market will continue to be limited unless some other factor comes into the picture to increase demand.

There was a time after World War II when many families were prompted to buy new homes because they found monthly payments were less than rent. A significant change undoubtedly took place in this relationship between 1950 and 1956. Rents increased by 22 percent which was considerably more than the 13 percent advance in the Consumer Price Index, but substantially less than the 39 percent rise in housing expense on new homes insured by FHA under Section 203. While the latter, of course, does not measure housing expense on all new homes, it should reflect the total trend reasonably well.

It can only be concluded that there is nothing in the family income--house price-rent relationship at the present time that encourages any expectation that these factors will contribute to a significant increase in homebuilding volume in the near future. These relationships will change, of course, and at some period will set the stage for another housing boom.

#### Outlook for Homebuilding in 1958

With the foregoing as background to place it in perspective, 1958 looks like a year for homebuilding which will be not much different from this year. There is a basic need arising out of the net increase in households, continued migration from farms to nonfarm places, and replacement of dwellings lost from the housing supply for construction of about 900,000 new nonfarm dwellings next year. This number will not permit any increase in the vacancy rate or upgrading of the housing stock, except as new units replace old homes that are destroyed.

American families will want to improve their housing during the year, however, even at costs and prices which probably will be somewhat higher than they are now. This pressure should be sufficient to provide a market for at least 1,100,000 new private nonfarm dwellings in 1958. A larger percentage of this market probably is for rental units than in the recent past. An upward trend in the construction of apartment structures during the last few months has begun to reflect this market.

211

Mortgage money undoubtedly will continue to be tight, especially in the early part of the year. Expected lessening in the demand from some other sources for long-term funds should improve the supply of mortgage money somewhat by mid-year. Multifamily housing probably will benefit most. It is doubtful, however, that this improvement will come in time to permit starting 1,100,000 new private dwellings in 1958. The number is likely to fall somewhat short of 1,100,000. When public housing is added, the total of new housing starts is likely to be about 1,100,000 units next year, an increase of about 7 or 8 percent over 1957.

#### Housefurnishing and Equipment

In view of the small upturn expected in housing starts in the last half of next year, some improvement in the demand for major household goods seems likely by the end of 1958. It must be kept in mind, of course, that equipping newly-built homes accounts for only a part of the market for such things as furniture, floor coverings, appliances, heaters, radios and television sets. The balance is a replacement demand which reflects directly the ability of consumers to buy. This, in turn, will hinge on the general level of business activity, employment and earnings.

Production of major household goods has declined from the 1955 peak, with a particularly sharp drop in output of radio and television sets (table 5). Production of appliances and heaters appears to be down so far this year, and for furniture and floor coverings a moderate decline also is indicated. It seems doubtful that factors will be present to cause a pickup in production of these items before late next year. Whatever increased demand may eventually arise out of the anticipated higher rate of homebuilding will not come until those new homes near completion or are actually completed and occupied.

Stable prices appear to be in prospect for housefurnishing and equipment as a whole with, of course, upward movements for some items and downward movements for others. By September 1957, prices of furniture and other durables were above the 1956 average by 3 percent at wholesale, while the consumer price index for housefurnishings had risen less than 2 percent (tables 6 and 7). From 1950 to 1956, wholesale prices of major household goods rose by 13 percent while retail prices advanced by less than 3 percent. These data can be used only for a general comparison of price movements at the wholesale and retail levels since they do not cover exactly the same items. For appliances alone, a 3-1/2 percent price rise at wholesale was in sharp contrast with a 13 percent drop at retail over this 6-year period. This reflects, of course, the influence of the discount houses and competitive pricing by department stores and other retailers.

The decline in retail prices of appliances also contrasts with a 21 percent increase for wool rugs from 1950 to 1956 and a 4 percent increase for furniture. Prices for both rugs and furniture have continued upward this year. In September 1957, rug prices were 7 percent above the 1956 average.

- 7 -

Table 1.—New Nonfarm Dwelling Units Started, by Ownership,  
Location and Type of Structure

Year	Total	<u>Ownership</u>		<u>Type of structure</u>	
		Private	Public	1-family houses	2-or-more family structures
		(Number in thousands)			
1946	670.5	662.5	8.0	590.0	80.5
1947	849.0	845.6	3.4	740.2	108.8
1948	931.6	913.5	18.1	766.6	165.0
1949	1,025.1	988.8	36.3	794.3	230.8
1950	1,396.0	1,352.2	43.8	1,154.1	241.9
1951	1,091.3	1,020.1	71.2	900.1	191.2
1952	1,127.0	1,068.5	58.5	942.5	184.5
1953	1,103.8	1,068.3	35.5	937.8	166.0
1954	1,220.4	1,201.7	18.7	1,077.9	142.5
1955	1,328.9	1,309.5	19.4	1,194.4	134.5
1956	1,118.1	1,093.9	24.2	989.7	128.4

213



Table 2.--HOUSEHOLDS IN THE UNITED STATES, BY TYPE

	Total all types	Husband- wife (Number in thousands)	Other family (Number in thousands)	Unrelated individuals
Number in 1950 .....	43,554	34,075	4,763	4,716
Number in 1957 .....	49,543	37,711	5,499	6,333
Average annual increase, 1950-57 .....	856	519	106	231
<u>Census Bureau Series II</u>				
<u>Projections</u>				
Number in 1960 .....	51,573	38,527	5,758	7,288
Average annual increase, 1957-60 .....	677	272	86	319
Number in 1965 .....	55,579	41,070	5,915	8,594
Average annual increase, 1960-65 .....	801	509	31	261
Average annual increase, 1957-65 .....	755	420	52	283
Number in 1970 .....	60,762	44,449	6,123	10,190
Average annual increase, 1965-70 .....	1,037	676	42	319

Source: Bureau of the Census, U.S. Department of Commerce, Current Population Reports, Population Characteristics, Series P-20, No. 76, July 5, 1957, and No. 69, August 31, 1956, Washington, D. C.

Table 3.--INCOMES, CONSTRUCTION COSTS, HOUSE SELLING PRICES,  
RENTS AND HOUSING EXPENSE, 1950 and 1956

	1950	1956	Percent increase 1950 to 1956
Median income of nonfarm families <u>1/</u>			
Current prices .....	\$3,497	\$5,049	44.4
1956 prices .....	\$3,953	\$5,049	27.7
Per capita disposable personal income <u>2/</u> in 1956 prices .....	\$1,536	\$1,708	11.2
Construction costs			
Boeckh index <u>3/</u> .....	107.7	129.4	20.1
Average for 1-family houses <u>4/</u>	\$8,675	\$12,225	40.9
Median selling price, new 1-family houses <u>5/</u> .....	\$10,200	\$14,500	42.1
Consumer price index <u>6/</u> .....			
All items .....	102.8	116.2	13.0
Rents .....	108.8	132.7	22.0
Monthly housing expense, FHA Sec. 203, new homes <u>7/</u> .....	\$75.41	\$104.60	38.7

1/ Current Population Reports, Consumer Income, Series P-60, No. 24, April 1957 and No. 26, Sept. 9, 1957. U.S. Bureau of the Census, Washington 25, D. C.

2/ Economic Indicators. Prepared for the Joint Economic Committee by the Council of Economic Advisers, U.S. Government Office, Washington 25, D.C.

3/ E.H. Boeckh and Associates, Washington, D.C. cost index for residences.

4/ Construction Review, U.S. Bureau of Labor Statistics, Washington 25, D. C.

5/ See footnote 2, Table 4.

6/ U.S. Bureau of Labor Statistics, Washington 25, D.C.

7/ Tenth Annual Report, Housing and Home Finance Agency, Washington 25, D. C.

211

Table 4.--DISTRIBUTION OF FAMILY INCOMES AND SELLING  
PRICES OF 1-FAMILY HOUSES 1950 and 1956

<u>Family incomes</u> <u>1/</u>		<u>Selling prices of</u> <u>1-family houses</u> <u>2/</u>	
Class	Percent of total		Percent of total
<u>1950</u>			
Under \$3,500	54	Under \$9,500	40
\$3,500-4,999	23	\$9,500-12,499	37
\$5,000 and over	23	\$12,500 and over	23
Median	\$3,319	Median	\$10,200
<u>1956</u>			
Under \$4,500	46	Under \$12,000	27
\$4,500-5,999	21	\$12,000-14,999	27
\$6,000 and over	33	\$15,000 and over	44
Median	\$4,783	Median	\$14,500

1/ Current Population Reports, Consumer Income, Series P-60, No. 24, April 1957 and No. 26, Sept. 9, 1957. U.S. Bureau of the Census, Washington 25, D. C.

2/ New Housing in Metropolitan Areas, 1949-51, Bul. #1115, Sept. 1952; and Characteristics of 1-Family Houses, 1954-56, Construction Review, April 1957, U.S. Bureau of Labor Statistics, Washington 25, D. C. Percentage distribution for 1956 does not add to 100 because selling prices on 2 percent of houses were not determined. Data for 1950 cover houses completed in the 4th quarter in 10 selected metropolitan areas. Data for 1956 cover houses started in the 1st quarter in nonfarm areas (urban and rural non-farm). Similar coverage for 1950 presumably would have increased the proportion in the lower price classes.



- 11 -

Table 5.--INDEXES OF CONSUMER DURABLE GOODS OUTPUT  
(1947-49 = 100)

Year	Total	<u>Major household goods</u>		
		Furniture and floor coverings	Appliances and heaters	Radio and tele- vision sets
1950	143	120	132	243
1951	118	104	112	178
1952	115	109	99	184
1953	132	113	118	230
1954	122	101	111	214
1955	145	116	139	249
1956	144	116	144	222
1957 (8 months) NA		114	126	203

Source: Derived from data published by the Board of Governors of  
the Federal Reserve System

219

Table 6.—Wholesale Price Indexes for Selected Household Durables

1947-49 = 100

	Indexes			Percent Change	
	1950	1956	Sept. 1957	1950-56	1956- Sept. 1957
<u>Furniture and other durables</u> .....	105.3	119.1	122.8	+13.1	+ 3.1
<u>Household furniture</u> .....	105.2	119.0	123.5	+13.1	+ 3.8
Metal household furniture .....	104.3	112.2	117.9	+ 7.6	+ 5.1
Wood household furniture .....	105.6	120.8	124.0	+14.4	+ 2.6
Upholstered household furniture .....	104.3	120.5	124.6	+15.5	+ 3.4
Bedding .....	106.4	120.9	127.6	+13.6	+ 5.5
<u>Commercial furniture</u> .....	109.7	141.8	153.6	+29.3	+ 8.3
Wood commercial furniture .....	110.6	134.0	137.0	+21.2	+ 2.2
Metal commercial furniture .....	108.8	145.2	160.0	+33.5	+10.2
<u>Floor Covering</u> .....	115.0	131.1	132.5	+14.0	+11.1
Soft surface floor covering ...	125.0	135.7	138.7	+ 8.6	+ 2.2
Hard surface floor covering ...	96.1	121.7	120.7	+26.6	- 0.8
<u>Household Appliances</u> .....	101.9	105.5	104.7	+ 3.5	- 0.8
Stoves .....	103.7	120.3	123.9	+16.0	+ 3.0
Laundry Equipment .....	99.2	106.4	108.8	+ 7.3	+ 2.3
Sewing machine .....	107.6	117.0	111.1	+ 8.7	- 5.0
Vacuum Cleaner .....	98.1	104.1	103.7	+ 6.1	- 0.4
Refrigerators and freezing units .....	102.0	96.6	91.7	- 5.3	- 5.1
Small electric appliances .....	102.9	99.1	101.2	- 3.7	+ 2.1
Electric lamps .....	101.6	117.1	118.8	+15.3	+ 1.5
<u>Radios and televisions</u> .....	96.8	93.1	96.7	- 3.8	+ 3.9
Radio .....	---	90.3	93.4	---	+ 3.4
Television .....	---	69.7	72.4	---	+ 3.9

Source: Bureau of Labor Statistics, U.S. Dept. of Labor

Table 7: -- Consumer Price Indexes for Selected Housefurnishings

1947-49 = 100

	Indexes		Sept. 1957	Percent Change	
	1950	1956		1950- 1956	1956- Sept. 1957
<u>Housefurnishings</u> .....	<u>100.3</u>	<u>103.0</u>	<u>104.8</u>	<u>+ 2.7</u>	<u>+11.7</u>
(includes textile house- furnishings)					
Rugs:					
Rugs, wool Axminster .....	121.4	147.2	157.0	+21.3	+ 6.7
Carpets, wool broadloom .....	112.8	118.8	126.8	+ 5.3	+ 6.7
Rugs, felt base .....	97.9	121.2	126.8	+23.8	+ 4.6
Rugs, cotton 1/ .....	---	96.5	95.5	---	- 1.0
<u>All furniture and bedding</u> .....	<u>102.1</u>	<u>107.6</u>	<u>110.2</u>	<u>+ 5.4</u>	<u>+ 2.4</u>
<u>All furniture</u> .....	<u>101.6</u>	<u>105.4</u>	<u>107.1</u>	<u>+ 3.7</u>	<u>+ 1.6</u>
Living room suites .....	100.0	110.3	112.1	+10.3	+ 1.6
Dinette sets .....	98.3	102.2	100.3	- 2.8	- 1.9
Sofa beds .....	101.4	112.7	116.9	+11.1	+ 3.7
Mattresses .....	103.9	112.9	119.7	+ 8.7	+ 6.0
Bedroom suites .....	105.1	102.2	100.3	- 2.8	- 1.9
Appliances 2/ ..... 1/	96.7	84.1	83.7	-13.0	- 0.5
Sewing machines .....	107.2	112.1	111.5	+ 4.6	- 0.5
Washing machines .....	100.3	98.2	100.6	- 2.1	+ 2.4
Vacuum cleaners .....	98.7	96.7	87.8	- 2.0	- 9.2
Refrigerators, electric .....	99.0	72.9	63.8	-26.4	-12.5
Cook stoves .....	99.4	101.9	103.9	+ 5.7	+ 2.0
Toasters 1/ .....	---	78.6	83.0	---	+ 5.6
Radios 1/ .....	90.4	88.7	92.0	- 1.9	+ 3.7
Television Sets 1/ .....	---	86.6	90.2	---	+ 4.2

1/ December 1952 = 100.0

2/ Includes refrigerators, stoves, washing machines, vacuum cleaners, sewing machines, toasters, radios and television sets.

Source: Bureau of Labor Statistics, U.S. Dept. of Labor











UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Marketing Service  
Agricultural Economics Division  
Washington 25, D. C.

✓ THE OUTLOOK FOR MEAT ANIMALS IN 1958

Statement presented by Harold F. Breimyer at the 35th  
Annual Agricultural Outlook Conference  
Washington, D. C., November 21, 1957

Consistently at these sessions of the last few years we testified to the fundamentally expansive trend in meat animal production. We admitted that too fast an uptrend in cattle production early in this decade made a slowdown or temporary halt inevitable. We also granted that cattle stood to outpace hogs in rate of increase. But an upward sweep of total production has been the longer run outlook.

The hesitation in upmovement came on schedule in late 1956 and 1957. Live-stock slaughter and meat output for 1957 will total about 3 percent less than in 1956. With meat supply smaller and population larger, consumption per person will average about 159 pounds compared with the record 166 pound rate in 1956. The 7-pound drop is significant. But also significant is that the 1957 rate still ranks as the third highest since 1908.

Reductions in meat consumption from 1956 to 1957 were about equally divided between beef and pork. They reflect chiefly the decrease in cattle inventories at the beginning of 1957, and the smaller pig crops of 1956.

Sometimes forecasters are tripped up by capricious fate. This time, though, fateful events reinforced our basic prediction of long run expansion. In 1957 rains came to drought-parched grasslands. In feed grain areas bumper crops were produced. Combined feed grain output exceeds the previous 1948 record. The hay crop also is record large. Abundant feed coming at a time of rising livestock prices has created strong pressure for a renewed increase in livestock production -- a pressure relieved only in part by price supports available on feed grains. Hog production has already started upward, with a gain in the 1957 fall pig crop of around 3 percent. It will continue upward in the spring of 1958. The size of the spring increase, and severity of the price consequences the following fall, has been a moot issue in recent weeks. It is entirely possible that neither will prove extreme, yet great enough that prices of hogs in the fall of 1958 will average appreciably lower than in the same seasons of 1956 and 1957. It is also possible that hog production will rise further in 1959.

Incentive to expansion in cattle will be partially masked by the slow workings of the cattle cycle. Inventory numbers of cattle were down on January 1, 1957 and slaughter rates since point to a probable further reduction on January 1, 1958. Moreover, numbers may continue downward a year or two after that. Since annual cattle and calf slaughter must decrease a little longer than inventories, not for three or four years at the earliest can it be expected to turn upward once more.

Nevertheless, the current situation will have some influence on cattle in 1958. It will give an upward push to the volume of cattle feeding, which may rise to a new high. This is particularly likely in terms of tonnage, as fed cattle will be marketed at heavy weights next year. Feeder cattle came off the range this fall in good flesh and above-average weight and will be fed to heavy slaughter weight. Concern with price discount for weight could easily overshadow other price considerations in the marketing of fed cattle this winter and next spring.

Assuming no substantial change in consumer demand, prices for fed cattle give promise of averaging a little higher in the feeding season beginning now than in the past season. Basis for this prospect is an impending supply decrease not for fed cattle but for other kinds. Until very recently cattle producers did not withhold many cows from slaughter in 1957, but in 1958 they will likely withhold quite a few. This may not reverse the cattle cycle in that year, because cows killed in 1957 will have no calves in 1958, and the 1958 calf crop will probably be down. But it will reduce total cattle slaughter and total beef output in 1958.

Feeders of cattle have paid higher prices for their feeder stock this fall than last. Probabilities are good that they will make at least average profits. One reason is that feed will cost less. Another is the experience that when cattle prices first turn cyclically upward their increases exceed expectations, making profits in feeding turn out well. After a couple of years enthusiasm outruns prudence --the mark of the cattle "boom"--and it is then that danger of feeding losses becomes great. To be sure, this normal pattern need not prevail in any one year.

Prices of sheep and lambs have been higher in 1957. They have joined in the higher level of all livestock and meat prices. Strong demand this fall for ewe lambs for breeding has given an added boost to prices. This demand could foretell the long awaited upturn in sheep production. However, previous indications of such an increase in production, which has been nearly stable since 1950, have not materialized. The current indication therefore cannot be trusted too much.

Holding more cows on farms is expected to reduce cattle slaughter and beef output in 1958. Consumption of beef per person may drop around 3 pounds from the 84 pounds in view for 1957. A higher percentage of the total next year will be fed beef, and less will be beef of the middle and lower grades. Assuming unchanged demand, prices of beef at retail will likely average a little higher than in 1957.

Supplies of pork per person in the first half of 1958 will differ little from 1957. Later in the year the effect of the larger spring pig crop will be seen. Increased pork supplies then may lift the year's total consumption about 2 pounds above 1957's 62 pounds. A 64 pound rate would be  $4\frac{1}{2}$  pounds less than the postwar average. Prices of pork may about equal 1957 in the first half of 1958 but be less later. Veal consumption will likely decrease in 1958 as fewer calves are born and more held back for restocking of herds. The consumption rate for lamb and mutton will not change much.

For consumption of all meat combined, the phrase is "158 pounds in 1958." Such a rate would be 1 pound less than that ~~now~~ expected for 1957. Except for more pork late in the year a greater reduction would be likely.

Apart from these prospective overall changes, most trends in supplies and prices in 1958 will be seasonal. Late arrival of feeder cattle from ranges may delay seasonal price declines for fed cattle. The low point in those prices has been in February seven times since the war. It may be later in 1958. Prices of hogs will likely rise in early winter, decline a bit, then advance during the spring. Prices in those months may average very close to a year earlier. The decline in hog prices next fall will be fairly sharp. How far they will drop below 1957 prices will depend on the size of increase actually made in the spring pig crop. For a more up-to-date indication of the prospective size of that crop, please take note of the Pig Crop Report of December 20.



THE OUTLOOK FOR PEANUTS IN 1957-58  
Statement presented by George W. Kromer  
at the 35th Annual Agricultural Outlook Conference  
Washington, D. C., November 20, 1957

The estimated supply of peanuts in the 1957-58 marketing year that began August 1, 1957 at 1,959 million pounds is nearly as large as a year earlier. An increase in carryover stocks -- mostly CCC cold storage--probably about offset the slightly smaller output in 1957. Nevertheless, the 1957 peanut crop will provide many more peanuts than needed for food and farm uses and CCC will acquire the excess under the support program.

Output of peanuts in 1957 is forecast at 1,504 million pounds, about 6 percent less than the 1,602 million produced last year. The acreage to be picked and threshed is up about 11 percent but the indicated yield per acre at 979 pounds is 178 pounds lower than in 1956. Extremely wet weather in the Southeastern area this year damaged both quality and quantity of peanuts. Continuous rains late in the growing and harvesting season appreciably damaged windrowed and stacked peanuts. Compared with last year, indicated production is down 18 percent in the Virginia-Carolina area and 19 percent in the Southeast but is more than twice as large in the Southwest.

Prices to farmers for Spanish and Runner peanuts this year are averaging near the CCC loan value, which is slightly less than last year. Virginia-Carolina peanuts have just started to move in volume and prices are also running near the loan rate. The loan value is the support price less about half a cent for charges for storage, inspection, grading and expenses of cooperatively marketing the peanuts. Loans on 1957 crop peanuts are available until January 31, 1958 and will mature May 31, 1958 or earlier on demand by CCC. The national average support price for 1957 crop peanuts is 11.1 cents per pound, compared with 11.4 cents last year. The season average price received by farmers for 1957 crop peanuts is likely to average near the loan value.

In recent years when supplies of peanuts were plentiful, civilians consumed about 6.5 pounds per person, farmers' stock basis (4.5 pounds shelled), at prices about reflecting support. In 1954-55 when the crop was short and prices rose, per capita consumption on a farmers' stock basis fell about a half pound. In 1955-56 supplies of the ball-park type peanuts were short and relatively high prices held total consumption to about 6 pounds. With lower prices and larger supplies of peanuts available last year, consumption increased to the 6.5 pound per person level.

Prospects point to an increase in consumption of peanuts during the 1957-58 marketing year. Supplies available during the season will be heavy and prices lower. Of course the extent to which the anticipated reduction in farm prices will be reflected in the price of peanut products purchased by consumers will have some bearing on the peanut consumption rate in 1957-58. Consumer incomes in the year ahead are expected to be fairly well maintained.

If the consumption of peanuts per person in 1957-58, should increase slightly and farm uses are about the same as in recent years, about 200 million pounds, or 13 percent of the 1957 crop, would be available for crushing, exports and carry-over stocks. As most of the excess peanuts will be acquired by CCC under



the support program, the quantity crushed and exported will to a large extent depend on Government sales policy. As of the end of October, farmers had about 100 million pounds of 1957 crop peanuts under loan.

### Prospects for 1958-59

If growing conditions are average, the 1958 peanut crop probably will result in a moderate surplus of peanuts above food and farm uses.

A marketing quota of 826,000 tons (1,652 million pounds) of 1958 crop peanuts and a national allotment of 1,610,000 acres for picking and threshing was announced on October 28, 1957. This is the minimum marketing quota and acreage allotment permitted under existing legislation. Under the formula required by law, the yield -- 1,026 pounds per acre -- used in making 1958 determinations is higher than that for 1957.

Peanut producers last December approved marketing quotas for the 1957, 1958 and 1959 crops. Quotas have been in effect since 1949. Price support will be available at a level between 75 and 90 percent of parity in 1958 and in 1959, depending upon the supply **at the** beginning of each marketing year.

Although the 1958 price support program has not been announced as yet, production probably will be large enough to keep prices around support.

The 1958 crop support price will be affected by the lowering of the transitional parity. Present legislation provides for "transitional" parity price to moderate the transition from "old" parity to "modernized" parity. For peanuts the transitional parity price is the old parity, less 5 percent multiplied by the number of full years that have elapsed since January 1, 1955 and is the effective parity until modernized parity becomes a greater, at which time the modernized parity becomes the effective parity price. Since the 5 percent reduction which would have accumulated in calendar year 1956 was eliminated by the Agricultural Act of 1956, transitional parity for 1958 will be 90 percent of the old parity provided it is not less than modernized parity. The October 15, 1957 parity prices for peanuts were 14.3 cents for the old compared with 12.3 cents for modernized parity, and 13.6 cents for transitional parity.

Another factor in determining the support level for the 1958 crop peanuts is the relationship between the estimated supply and the "normal" supply for that marketing year. For example, if the estimated supply (carryover stocks, production and imports) is expected to be not more than 108 percent of the normal supply, support would be at 90 percent of parity. At the other extreme, if the supply percentage should be more than 130, minimum support would be 75 percent. Normal supply is defined by legislation as the estimated domestic consumption and exports plus a carryout equal to 15 percent of the two.

The estimated supply and consequently the minimum support level for 1958 crop peanuts will depend largely on the size of the carryover. The greater the carryover, whether in Government or commercial hands, the greater the supply percentage.

The following is an example of the probable range of support prices for the 1958 crop.

Assuming no change from October 15, 1957 level in the index of prices paid, interest and taxes, transitional parity in 1958 would be 12.9 cents per pound (90 percent of the old parity of 14.3 cents). Support at 75 to 90 percent would range from 9.7 cents to 11.6 cents per pound. Support for the 1957 crop is 11.1 cents per pound, 81.4 percent of parity.

UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Marketing Service

THE OUTLOOK FOR RICE IN 1958

Statement presented by Robert E. Post at the  
35th Annual Agricultural Outlook Conference,  
Washington, D.C., November 20, 1957

A year ago, at the rice session of the Outlook we were fortunate to have the Rice Situation, just released that same morning. This year, the release date has been delayed until December 23. In the absence of the Rice Situation report with its charts, let us turn to the rice charts in the Outlook Chartbook on page 63.

The Rice Situation in 1957-58

The first chart (1408) covers disposition of U. S. rice supplies. The next to the last year shown indicates that the rice carryover at the end of the 1956-57 year, on August 1, 1957 (20.1 million cwt., in terms of rough rice) was reduced sharply (42 percent) from the record of 34.6 million cwt. a year earlier. This sharp cut reflected record 1956-57 exports of 37.7 million cwt., which were largely of CCC stocks moved under Government foreign aid programs. The reduction in carryover also reflected a 15 percent smaller crop, resulting from a sharp reduction in acreage under the allotment and quota programs.

The carryover of rice on August 1, 1957, the beginning of the new marketing year, together with the crop estimated at 42.9 million cwt. and imports of about 0.2 million cwt., results in total supplies for 1957-58 of 63.2 million cwt. This, together with distribution items, are shown in the table on page 4. Use of rice in the United States is estimated at about 27.2 million cwt. and exports are expected to total about 19 million cwt. Exports will again be largely from CCC stocks under Government financing. This disappearance would leave about 17.0 million cwt., in terms of rough rice, as the carryover on August 1, 1958. While a carryover of this size would be down sharply from the record on August 1, 1956, it is still over three times the 1946-55 average of 5 million cwt.



It is interesting to note that food consumption of rice in the United States, according to revised figures, has risen about 10 percent in the last 3 years, from 5.3 pounds in 1953-54 to 5.9 in 1956-57. The average in the 5 years, 1949-53, was 5.4 pounds. This increase in consumption reflects results of promotional work on the part of the rice industry as well as expanded use resulting from distribution of CCC stocks to schools and welfare institutions.

#### U. S. Rice Production and World Trade

Now let us turn to the chart on rice production (1407) which is in the upper right hand corner. Here we see that the all-time high production of 64.2 million cwt. was reached in 1954. This represented a very sharp increase compared with before World War II, when production averaged less than 25 million cwt. This increase was in response to higher prices caused by increased export demand for U. S. rice, a situation resulting from war and postwar disruption in production and export availabilities in other countries.

In 1952, supplies in other countries began to become plentiful. However, major exporting countries were unwilling to make price adjustments and supplies began to mount. In the United States stocks increased sharply from August 1, 1954 to August 1, 1955 and reached a peak in 1956. This in turn made acreage controls necessary. As a result, production has been reduced in the past three years. However, because of a new record high level of yields per acre, production was not down as much as acreage.

In 1955-56, the world trade situation changed. World surpluses were liquidated in that year, and in 1956-57 the rice market became relatively stable and world trade moved up 15 percent--by far the largest gain in a decade. This was the year of our record exports.

#### The Rice Outlook for 1958-59

Under provisions of existing legislation and with the large supplies still remaining, acreage allotments and marketing quotas will, no doubt, need to be proclaimed again for the 1958 crop. The national acreage allotment for 1958 is set by law at the 1956 level of 1,653,000 acres. Assuming that growers approve marketing quotas, that underplanting and abandonment total about 40 thousand acres, and that about 150 thousand acres are placed in the Soil Bank, about 1,460 thousand acres would be harvested. If yields are the same as the 30.85 cwt. per harvested acre, the 1955-57 average, a crop of 45.0 million cwt. would be produced. With domestic disappearance for 1958-59 estimated at 27.4 million cwt.,



a crop of this size would require exports in excess of 17.8 million cwt. in order to have a reduction in the carryover on August 1, 1959. If yields equal to the record high 31.73 cwt. per harvested acre were obtained, a crop of 46.3 million cwt. would be produced and exports in excess of 18.9 million cwt. would be needed to avoid an increase in the carryover.

#### Rice Prices and Support Rates

Now let us look at the price chart on the bottom of the page (1851). Except for 1951 and 1954, season average prices received by farmers for rice have exceeded support levels in every year since the support programs were first announced in 1941. The average price received for rice in mid-October 1957 was \$4.94, which was above the support level of \$4.72. It was also above the average price in mid-September and mid-August, and above the \$4.71 in mid-October 1956. For the 1957-58 marketing year as a whole, prices received by farmers are again expected to average slightly above the national average support rate, with some varieties and qualities below price supports.

The support rate for 1957-crop rice of \$4.72 per hundredweight is 82 percent of parity and for 1956-crop rice it was \$4.57 per hundredweight, 82½ percent of parity.

As of October 30, 1957, the USDA had approximately 15.6 million cwt. of rice in its inventory. Most of this rice was acquired in price-support operations on the 1956 crop. A year ago, the Department had approximately the same quantity of rice (15.3 million cwt.) following heavy June-September exports. The export financing program has been delayed this year and the movement through September was light.

\* \* \* \* \*

There have been revisions in the rice tables on page 93 in the Chartbook. The table which follows includes revisions in table 98. The figures for 1957 in table 97 as of November 1, reading from left to right beginning with "Acreage seeded--Southern States" are as follows: 3/ 1,146; 231; 1,377; 2,905; 4,164; 3,116; 33,286; 9,618; 42,904. Footnote 3, at the end, is changed from 2 (31) in 1957 to 1 (27).

Rice, in terms of rough: Supply and distribution, United States,  
1956-57, 1957-58 and 1958-59 projected 1/

Items	Year beginning August 1		
	1956 <u>8/</u>	1957 <u>9/</u>	1958
	Million cwt.	Million cwt.	Million cwt.
<u>Supplies</u>			
Beginning stocks	34.6	20.1	17.0
Farm production <u>2/</u>	47.5	42.9	45.0
Imports <u>3/</u>	.3	.2	.2
Total <u>4/</u>	84.8*	63.2	62.2
<u>Disappearance</u>			
Food <u>5/</u>	19.0	19.4	19.6
Industry <u>6/</u>	5.3	5.4	5.4
Feed and seed	2.7	2.4	2.4
Total domestic	27.0	27.2	27.4
Exports	37.7	19.0	
Total disappearance	64.7	46.2	
<u>Ending stocks</u>	20.1	17.0	

\*Includes an adjustment of 2.4 million cwt. to equal total distribution.

Footnotes are the same as in Agricultural Outlook Charts 1958, page 93,  
table 98.

UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Marketing Service

THE OUTLOOK FOR TOBACCO FOR 1958 AND LONGER-TERM PROSPECTS

Statement presented by Arthur G. Conover at the  
35th Annual Agricultural Outlook Conference,  
Washington, D. C., November 20, 1957

Growers of tobacco reduced acreage of several kinds during 1957 to bring about a reduction from last year's high levels of supplies. The total 1957 production for all types combined is the smallest in 14 years. Progress towards reducing surpluses has been made, but carryovers from previous crops remain large. The smaller flue-cured crop has been accompanied by prices averaging moderately higher than last season, but even so, growers' incomes dropped substantially because of the steep cut in production. Consumption levels of most leaf tobacco types in the past year were not encouraging and prospects for any appreciable increase in the year ahead are not promising. Exports during the 1956-57 marketing year fell off about an eighth from the higher-than-usual level of 1955-56 and may decline further in 1957-58.

The 1957 acreage reduction reflects cuts in allotments and participation in the Soil Bank. Also, yields per acre are lower than the record or near record yields of last year. In 1958 most kinds of tobacco will continue under marketing quotas and acreage allotments. The 1958 quota for flue-cured will be announced by the Secretary of Agriculture by December 1 and for other kinds by February 1. For several kinds of tobacco, quotas on the 1958 crop were approved by growers some time ago. Grower approval in a referendum means a quota will be in effect for each of the next 3 crops. Growers of the fire-cured and dark air-cured types will vote prior to next planting season on whether or not they favor quotas on their next 3 crops. At least two-thirds of the growers voting must approve if quotas are to be applied.

The Soil Bank program contributed significantly to the 1957 acreage reduction for some types and will again be available to eligible tobacco growers in 1958.

The 1958 Government price supports for the kinds of tobacco under marketing quotas will be 90 percent of parity except for fire-cured, dark air-cured, and sun-cured. For many years, price supports for fire-cured



have been set at 75 percent, and for dark air- and sun-cured, at  $66 \frac{2}{3}$  percent, of the burley support level. Beginning with the 1958 crop however, support levels for these kinds cannot exceed this year's levels unless 90 percent of parity for these tobaccos rises above 1957 support levels.

### Supply Position of Leaf Tobacco

About 2 dozen types of tobacco are produced in the United States by nearly three-fourths of a million farm families; to most of them, tobacco represents a vital source of cash income. For the brief discussion which follows, several types are combined into broader groups or kinds of tobacco.

The 1957-58 total supply of flue-cured is nearly 3.5 billion pounds--6 percent lower than the record 1956-57 figure. The one-third cut in production from last year more than offset the substantial rise in carryover. The total supply is the third largest on record and close to 3 times prospective disappearance. A more balanced relationship is  $2\frac{1}{2}$  times disappearance.

The great bulk of the 1957 crop has been marketed. Prices have averaged about 55 cents per pound--7 percent above last season and just over the record average of 1950. The 1957 price support level at 50.8 cents was nearly 4 percent above 1956. For the season as a whole, receipts under Government loan were far below most previous years but during the closing weeks of the season, a substantial percentage has been going under loan.

The 1957-58 total supply of burley at nearly 1.8 billion pounds is 1 or 2 percent lower than in 1956-57 and 4 or 5 percent below the record high of 3 years ago. Though carryover is the third largest on record, this year's crop is indicated to be 5 percent below last year and the second smallest since 1943. The 1957-58 total supply is about 3.5 times probable disappearance. The high for this ratio was 3.6 during 1954-55, while for several years prior to that, it ranged from 2.7 to 3.3. Burley auctions will open November 25 and a strong demand is expected. Prices probably will not average as much as the record  $63\frac{1}{2}$  cents per pound of last season, when quality was exceptionally high. The level of price support is 51.7 cents per pound-- $7\frac{1}{2}$  percent higher than last season. Only about 1 percent of the crop went under Government loan last season.

The 1957-58 total supply of Maryland tobacco is estimated at 103 million pounds--5 percent lower than a year earlier. This year's acreage is the smallest since 1945 but carryover may be up a little.

Auction marketings for the 1957 crop will be during next spring and summer. The support price for the 1957 crop is 48.0 cents per pound--2 percent higher than last season. Auction prices for the 1956 crop averaged 51 cents per pound. During the past year, exports of Maryland tobacco increased further and were the highest since the late 1920's.

The 1957-58 total supply of fire-cured tobacco at about 199 million pounds is 4 percent lower than for 1956-57. This year's production is down by nearly one-fourth and more than offsets the moderate rise in carryover. Beginning with 1958, separate marketing quotas will be determined for Virginia fire-cured (type 21) and for Kentucky-Tennessee fire-cured (types 22-23). Auctions for Virginia fire-cured will open in early December and for Kentucky-Tennessee types, usually begin in early January. The level of price support at 38.8 cents per pound is  $7\frac{1}{2}$  percent above last year. Last season, an exceptionally large amount went under Government loan. Exports usually account for around half of total disappearance of fire-cured tobacco. During the past year, exports of Kentucky-Tennessee fire-cured and Virginia fire-cured dropped about a tenth below the preceding year.

The 1957-58 total supply of dark air- and sun-cured tobacco at nearly 109 million pounds is 9 percent below 1956-57. Carryover, though down a little from a year ago, is second largest in many years. More dark air-cured than usual went into nonchewing uses during the past year. Auctions for these types open shortly. The level of price support at  $34\frac{1}{2}$  cents per pound is  $7\frac{1}{2}$  percent above last season. Exports of dark air-cured tobacco in 1956-57 rose substantially above the low 1955-56 level. This increase resulted mainly from 1950 and prior crop tobacco under Government loan being sold at reduced prices.

The 1957-58 total supply of continental cigar filler at about 176 million pounds is 5 percent lower than in 1956-57 and the lowest on record. Drought conditions during the growing season sharply reduced the Pennsylvania crop. Stocks of Puerto Rican cigar filler on October 1 at 50 million pounds were one-eighth lower than a year ago. The Puerto Rican crop of 24 million pounds harvested during the first half of 1957 was the smallest in many years. The Puerto Rican Government has set a 25 million quota on the coming crop; this is well below the disappearance during 1956-57.

The 1957-58 total supply of cigar binder types at about 128 million pounds is 11 percent below 1956-57 and 20 percent below 1955-56. Production in the Connecticut Valley is down very sharply due mainly to the wide participation in the Soil Bank program. Production in Wisconsin is only a little lower than last year. The carryover of the combined binder types is one-tenth lower than a year ago. Domestic use of

Connecticut Valley Broadleaf and Havana Seed declined sharply in the past year, but use of Wisconsin tobacco increased some.

The 1957-58 total supply of shade-grown cigar wrapper types at nearly 36 million pounds is 5 percent greater than for 1956-57 and nearly equal to the record 1952-53 figure. The increase in supply is mainly due to the larger carryover. In both the Connecticut Valley and in Georgia-Florida, production this year was only slightly more than last year.

#### Consumption and Exports

Tobacco smokers of this country number about 62 million smokers--56 million who smoke daily and 6 million who smoke occasionally; several million others use tobacco in the form of chewing and snuff.

Cigarettes utilize flue-cured, burley, Maryland, and imported oriental tobacco. Recent estimates indicate that of those over 15 years of age, nearly 6 out of 10 males and over 3 out of 10 females smoke cigarettes everyday. How cigarette consumption in the year ahead will compare with the past year or two is uncertain. A major unknown is the reaction of smokers or potential smokers to statements and publicity dealing mainly with excessive cigarette smoking and lung cancer. Figures for several additional months will be necessary before definite trends may be evident. If the rate of cigarette consumption estimated for the first two-thirds of the year is maintained, the 1957 total will approximate 405 billion compared with nearly 392 billion in 1956. Total manufacture, which includes cigarettes produced for export and shipments to overseas forces and possessions, may be about 438 billion--3 percent above 1956 and slightly above the earlier record of 1952. Filter tip cigarettes have continued to gain and according to trade sources, may account for two-fifths or more of the 1957 total. In mid-1957, prices of nonfilter tip cigarettes were increased but not prices of filter tips. This greatly narrowed the price gap between the older-established brands and filter tips which have always sold at a premium.

Although numerical output of cigarettes has increased 9 percent in the last 3 years, it has not enlarged this outlet for leaf. Manufacturers have steadily increased the number of cigarettes turned out per pound of leaf so that in 1957, it is about 10 percent more than 3 years ago. If during the 3-year period, 1955-57, cigarettes had required on the average as much leaf as formerly, an additional 250 million pounds of tobacco would have been used. Possibly three-fifths of this drop from what might have been expected, was due to the sharp shift towards filter tip cigarettes, which generally require less tobacco. During the past year or so, the space for tobacco in a sizable volume of filter tips has been reduced even further as cigarette makers shortened their overall length by 6 percent. If longer filters should be generally adopted for filter tip cigarettes, this would mean a further reduction in tobacco requirements per unit of output.



Other factors as well as the shift to filters are holding down the use of leaf. Processed sheet tobacco and stems are being utilized on an increasing scale. Also newer and more efficient machinery and techniques have helped to reduce loss or waste of leaf between the initial purchase of farm-sales-weight tobacco and the final stage of cigarette manufacture.

Cigar and cigarillo manufacture utilizes several types of cigar tobacco grown in this country and Puerto Rico and also imported types mainly from Cuba and the Philippine Republic. Total cigar and cigarillo consumption in 1957 is estimated at 6.2 billion--not much different than in 1956. Changed reporting procedures have obscured trends as depicted by monthly data in the past year and a half. Consumption in the past 2 years averaged about 2 percent above the level of the previous 3 years. Cigar consumption in 1958 is likely to remain stable or perhaps resume a gradual increase. Cigar manufacturers are using processed binder on an increasing proportion of their output and considerable further displacement of natural leaf binders will occur in the year ahead.

Smoking tobacco for pipes and "roll-your-own" cigarettes is a secondary outlet for the cigarette types of tobacco--particularly burley. The 1957 output estimated at about  $69\frac{1}{2}$  million pounds, is 2 million pounds below last year and the lowest since the late 1890's. With consumer incomes at favorable levels, an appreciable rise in purchases of smoking tobacco for reasons of economy is not likely. Some smokers concerned about the alleged effects of cigarettes on health may switch from cigarettes to pipes. Pipe manufacturers indicated a rise in sales recently.

Chewing tobacco utilizes dark air-cured, burley, and a sizable amount of the cigar binder types. The 1957 output of chewing tobacco is estimated at 73 million pounds-- $2\frac{1}{2}$  to 3 million pounds less than in 1956 and the smallest on record. The downtrend in chewing tobacco is likely to continue. In the past decade, plug chewing tobacco has fallen farther than scrap chewing.

Snuff manufacture--utilizing mainly fire-cured tobacco--is estimated at about 36 million pounds--over a million less than in 1956 and the smallest since the mid-1930's. The successive drops in the last 2 years mark a departure for this usually highly stable product.

Exports of tobacco leaf in the 1956-57 marketing year totaled 557 million pounds (farm-sales weight)--down 14 percent from the high 1955-56 figure. Total exports seem likely to decline further in 1957-58; they might be down another 5 to 10 percent. This year's crop of flue-cured--the predominant export tobacco--is the smallest in many years and prices of some grades sought for export have averaged significantly higher than last year. Total supplies of most kinds of tobacco are ample, but individual grades, particularly of burley, have been in short supply or virtually unavailable.

113

### Longer-Term Outlook--1965 Projections

For the longer-term outlook, it is assumed that income per capita will increase substantially by 1965, and reflect generally favorable levels of economic activity. It is further assumed that the controversial health aspect will have no prolonged adverse effects on tobacco consumption. Based on Census population projections, the number of male cigarette smokers may increase about one-tenth by 1965. The proportion of women who smoke has more than doubled in the last 2 decades though it is still well below the proportion of men smokers. The proportion of women smokers is expected to continue to increase. The number of female smokers might be up one-third or more by 1965. Women smokers average about one-fourth fewer cigarettes daily than men smokers. It is assumed that such a differential in consumption rate is likely to be the case in 1965. On the basis of the projected increases in number of smokers and current rates of consumption, output of cigarettes in 1965 would need to be around 500 billion annually--roughly 15 percent larger than in the past year. Based on the recent trends towards filter tip cigarettes and utilization of more processed sheet and stems, total use of leaf tobacco in cigarettes will not rise this much. Instead, the increase in leaf requirement might be only around 5 percent greater than usage in the past year.

The number of cigar and cigarillo smokers may be up about a tenth by 1965. Of the men who smoke cigars, about 1 out of 4 smoke them every day, while the others smoke them occasionally. Future additional regular smokers of cigars are likely to come from this relatively large group who smoke cigars occasionally. The assumed higher level of real income by 1965 could be expected to shift some occasional cigar smokers to the regular smoker group and also perhaps raise the daily average consumption rate a little. Cigar consumption in 1965 may approach  $7\frac{1}{4}$  billion, an increase of more than 15 percent above the level of the last year or two. However, the increase in leaf requirement would be less than this. The great bulk of all cigars and cigarillos probably will be utilizing a processed binder with the result that less binder leaf will be needed despite the increase in cigars. Research efforts may bring forth "sheet wrapper" for cigars by 1965. The cigar filler and other tobacco requirements will depend on whether the average size of cigars tends to remain near that of recent years. A trend towards smaller-sized cigars and cigarillos would lessen the tobacco requirement per unit of output; this would mean a smaller percentage increase in the cigar leaf requirement by 1965 than in cigar numbers.

Since 1950, consumption of smoking tobacco in pipes and "roll-your-own" cigarettes has declined steadily. An estimated four-fifths of the smoking tobacco is consumed in pipes and one-fifth in "roll-your-own" cigarettes. Based on a continuation of recent trends, "roll-your-own" cigarettes may drop another 40 percent by 1965. It is estimated that nearly two-thirds of the pipe tobacco is consumed by smokers over 45 years of age. The number who smoke pipes regularly may decline about 7 percent by 1965, although it's conceivable that the downward trend could halt or reverse. Total output of smoking tobacco for pipes and "roll-your-own" cigarettes might drop about an eighth by 1965.

The output and consumption of chewing tobacco have decreased steadily for many years except during World War II when there was a temporary interruption in the downtrend. By 1965, consumption of chewing tobacco may be 15 percent or more below the current level. Modern attitudes and circumstances of employment and living generally tend to discourage the use of chewing tobacco. There are some employments however, where because of hazards from fire, explosion, or dusty conditions, chewing or snuff are the only possible forms of tobacco consumption.

Although total snuff consumption fluctuated only narrowly from 1946 through 1955, it dropped  $4\frac{1}{2}$  percent in 1956 and probably another 3 or 4 percent in the past year. If the average decline in per capita use during the past 5 years should continue, total snuff consumption may be down about 7 percent by 1965.





THE OUTLOOK FOR VEGETABLES AND POTATOES IN 1958 y

Statement Presented by Will Simmons at the 35th  
Annual Agricultural Outlook Conference  
Washington, D. C. November 20, 1957

SUPPLY AND DEMAND PROSPECTS

Supplies of vegetables and melons for fresh market sale in the first half of 1958 probably will be at least moderately larger than in the first six months of 1957. Supply of frozen vegetables is also expected to be larger. On the other hand, fewer canned vegetables, dry beans, dry peas and potatoes are likely to be available than a year earlier.

Previous speakers have pointed out the probability that general business activity and disposable income in the year ahead are likely to be maintained. The domestic demand for vegetables in 1958 is expected to continue strong. Thus, supplies of vegetables and potatoes available will have an important bearing on farm prices and income compared with a year earlier, and on consumer prices.

Indications are that, in general, equipment, materials and facilities needed to produce, package and distribute vegetables will be in ample supply during the first half of 1958. Prices of many items, however, are expected to continue to inch upward, and production costs are likely to be a little higher than in the current year.

COMMERCIAL FRESH VEGETABLES

Assuming more normal weather, production of vegetables and melons for fresh market sale in the first half of 1958 may be moderately larger than a year earlier, when plantings in some areas were curtailed because of lack of sufficient moisture, and yields were cut by excessive rains in Florida and Texas. Acreages planted to both winter and spring vegetables were a little smaller in 1957 than in 1956, and yields of winter vegetables and spring melons were down. Estimates of acreage of vegetables for winter harvest are presently available for only 7 crops. Acreages of artichokes, kale, and spinach are smaller than in the winter of 1957, but these reductions are more than offset by larger acreages of beets, cabbage, lettuce, and shallots. Combined acreage of the 7 vegetables is 5 percent larger than in 1957. Should yields be near the average of recent years, production on the indicated acreage would be up substantially from a year earlier. Since these vegetables usually account for about half of total winter volume, it seems likely that total production will be larger this winter than last.

The Department guide for spring vegetables and melons recommends a slight increase in acreage, with the objective of about the same vegetables as in 1957, but substantially more melons.

It is too early to say much about price prospects for fresh market vegetables during the first half of 1958. Much depends upon the pattern of marketings as well as volume. However, should winter and spring production be significantly larger than last year, prices received by growers probably would average moderately below those of 1957.

## VEGETABLES FOR COMMERCIAL PROCESSING

Supplies of canned vegetables into mid-1958 are expected to be a little smaller than the heavy supplies of a year earlier, but frozen vegetables are likely to continue in record supply. Carryover stocks of both canned and frozen items at the beginning of the current marketing season were substantially larger than a year earlier, but indications are that the canned pack is likely to be materially smaller and the frozen pack at least moderately smaller. Acreage for processing was down moderately from 1956, and yields for most crops were somewhat lower. According to reports in early November, aggregate prospective production of 9 important vegetables for commercial processing was down about 18 percent from the 1956 record, but significantly above the 1949-55 average. Although supplies of canned vegetables are still large, most items appear to be in better balance with anticipated demand than last season. Among major canned items, supplies of tomatoes, tomato juice and most tomato products are likely to be moderately to substantially smaller than the heavy supplies of a year earlier. But supplies of green peas, sweet corn and snap beans probably will be near record. Other canned vegetables and all frozen items promise to be in plentiful supply.

Demand for processed vegetables is expected to continue strong. Consumption of canned vegetables in 1958 is likely to be maintained near the high levels of 1957, while consumption of frozen vegetables is expected to be larger. With smaller supplies of canned vegetables available, and higher processing and distribution costs, wholesale and retail prices of both canned and frozen items into mid-1958 probably will be a little higher than a year earlier.

There is as yet no indication of the 1958 acreage of vegetables for commercial processing. Assuming yields near the average of recent years, however, it appears at this time that a slight to moderate cut in acreage may be needed to avoid the risk of burdensome supplies in the 1958-59 marketing season.

## DRY BEANS AND PEAS

Substantially fewer dry edible beans will be available for distribution in the 1957-58 season than a year earlier. But supplies appear fully ample to meet domestic and normal export demand. Carryover stocks at the beginning of the season were somewhat smaller than a year earlier, and production is expected to be down about 8 percent. Also, the distribution of the various types of beans appears to be in better balance than a year earlier, when pea and red kidney beans were in burdensome supply, while pintos and blackeyes were in relatively light supply.

The domestic market is expected to take about the same to slightly more dry beans. But exports probably will be somewhat smaller than in the past season, when substantial quantities moved out of the country under special



Government export programs. Prices received by farmers in the current marketing season compared with a year earlier will vary by classes. But with somewhat smaller supplies, and the same national average support rate, overall prices for the 1957 crop are expected to average a little higher than for the 1956 crop. Farmers probably will plant about the same acreage of dry beans in 1958 as in 1956 and 1957.

Supplies of dry field peas were relatively large in the 1956-57 season. During the early part of the season, export demand held prices at fairly favorable levels. However, by late winter the remaining large supplies resulted in a seriously depressed market.

Carryover stocks at the beginning of the current year were much larger than a year earlier, but 1957 production was cut sharply. Total supplies appear to be moderately to substantially below those of last season, but above the 1949-55 average, and more than ample to meet anticipated demand. Domestic demand for dry peas is expected to be about the same as in 1956-57, but with better crops in Europe exports are likely to be smaller. Prices received by farmers in mid-October averaged \$3.10 per hundredweight compared with \$4.67 in October 1956. Barring an unexpectedly large export demand, prices are expected to continue at fairly low levels.

Reportedly the sharp cutback in 1957 acreage was due to wet weather at planting time. However, if growers are to avoid the risk of surplus supplies in 1958-59, they would do well to hold 1958 acreage near or below the 1957 level.

#### POTATOES AND SWEETPOTATOES

The farm price outlook for potatoes during the next several months is considerably more favorable than that of a year earlier. Production of fall crop potatoes is estimated at 156 million hundredweight, compared with almost 167 million in 1956. Assuming a fairly normal movement of potatoes during the fall, stocks on hand January 1 would be smaller than the large stocks of January 1, 1956. Further, should yields be near the average of recent years, on the indicated acreage in Florida and California, production for winter harvest is likely to be down substantially from the high level of last winter.

Federal marketing agreements and orders are again in effect in States or areas which account for about 70 percent of fall production. The purpose of such orders is to restrict the marketing of tablestock potatoes to the more desirable qualities and preferred sizes, and to increase returns to growers. Also, to promote the orderly marketing of good quality potatoes and increase returns to growers, a diversion program is in effect for 1957 fall potatoes, similar to the one for the 1956 fall crop. With smaller supplies of potatoes this fall and winter, prices received by growers are expected to average substantially above the low levels of a year earlier. Consumers too can expect somewhat higher price tags at the retail level.

121

Farmers in making plans for 1958 should remember that on a national basis, a moderate sized crop of potatoes brings a higher net return than a large crop.

Demand for sweetpotatoes into next summer is expected to be about the same as a year earlier. Overall production was slightly larger than a year ago, but there were significant reductions in most commercial areas with satisfactory storage facilities. This means supplies available in Northern markets this coming winter and spring probably will be down from a year earlier, and prices to farmers are expected to average at least moderately higher than in the early months of 1957.

Higher prices for the 1957 crop might result in increased acreage in some states in 1958. But experience in recent years suggests that the high labor requirements for growing, harvesting, and handling the crop, and the difficulty of controlling the sweetpotato weevil in the Southeast, are likely to discourage any significant overall increase in acreage.

UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Marketing Service

THE OUTLOOK FOR WHEAT IN 1958

Statement presented by Robert E. Post at the  
35th Annual Agricultural Outlook Conference,  
Washington, D. C., November 20, 1957

The wheat outlook was covered in the August issue of the Wheat Situation, which was released before the seeding time of the winter wheat crop. I will here briefly review that outlook statement, making such changes as are necessary to bring it up to date. These changes were largely covered in the October issue. I have arranged to have the 3 charts which appear in the chartbook projected to illustrate my remarks.

The Wheat Situation in 1957-58

The wheat carryover on last July 1 was down 125 million bushels from a year earlier. This is shown as the next to the last year on this first chart (1016A) as the carryout for the marketing year beginning July 1, 1956. The carryout, which increased from 256 million bushels for 1951-52 to 1,036 million for 1954-55, was down to 908 million at the end of the 1956-57 year.

The reduction in stocks at the end of 1956-57 resulted from record exports of 549 million bushels of wheat. This exceeded the previous record of 504 million bushels in 1948-49 by almost 10 percent. As in other recent years, a large part of the exports were moved under Government foreign aid programs and also by export subsidies.

In the 1956-57 marketing year, the cost of all the various Government wheat programs to stabilize wheat prices and incomes totaled \$827 million, which is about one-fourth of the total of \$3,255 million spent on all commodities for these purposes. A large part of the total spent on wheat represents the outlay to facilitate large-scale exports.

Agriculture-Washington

165



The carryover next July 1, the end of the 1957-58 marketing year (the last year shown on the chart), may be down somewhat further, possibly around 50 million bushels. This is on the basis of exports estimated at 400 million bushels, which is sharply below the 1956-57 record but still very large. Total supplies for the 1957-58 marketing year are estimated at 1,843 million bushels, including the carryover, the crop estimated at 927 million and imports, mostly of feeding quality wheat, of about 8 million bushels. Although smaller than in the last 3 marketing years, these supplies are larger than in any year before 1954-55. Domestic disappearance for 1957-58 is estimated at about 590 million bushels, slightly above 1956-57, reflecting some increase in feed and seed use. Assuming exports of 400 million bushels, the carry-out at the end of the 1957-58 year would total about 850 million bushels compared with 908 million last July 1.

The next chart (650A) shows a reduction in production from the peaks in 1947 and 1952. However, production in 1957 was still 8 percent above the 5-year prewar average. While the acreage seeded for harvest in 1957 was the smallest since records were started in 1919, and 30 percent below the 5-year prewar average, yields have been increasing, and in 1957 they reached the high record of 18.7 bushels per seeded acre, 50 percent above the 5-year prewar average.

#### The Wheat Outlook for 1958-59

The total acreage which will be placed in the 1958 Acreage Reserve Program is estimated at about 5.0 million acres, consisting of the 3.9 million acres of winter wheat put in through the close of the winter wheat sign-up October 4, and an allowance for spring wheat on the basis of the percentage of winter wheat offered in the spring wheat States.

With an allotment of 55 million acres for all wheat for 1958, the same as for 1956, it is assumed that without an Acreage Reserve Program about the same acreage would be seeded for the 1958 crop as the 61 million acres seeded for the 1956 crop. If 5 million acres are removed by the Acreage Reserve Program and average abandonment and diversion are assumed, about 50 million acres would be indicated for harvest in 1958.

If 20 bushels per harvested acre are obtained on 50 million acres, a crop of about a billion bushels would be produced in 1958. Yields per acre have been very high in recent years on the curtailed acreages. Thus far this year, moisture conditions have been excellent. If yields in 1958 are equal to the all-time record of 1957 of 21.5 bushels per acre, a crop well in excess of a billion bushels would be produced.

Domestic disappearance in 1958-59 is estimated at about 600 million bushels. This is a little above that of recent years to allow for some increased feeding. If the crop in 1958 should total around a billion bushels, exports in excess of 400 million bushels would be necessary to avoid an increase in carryover stocks. Exports of this size could well occur, depending upon the extent of Government financing, but a substantial decline in wheat carryover at the end of the 1958-59 marketing year would not be likely.

In this discussion, we have seen that the very large carryover was reduced 125 million bushels in the past marketing year and in the current 1957-58 marketing year it may be reduced another 50 million bushels, but that in 1958-59 a further substantial decline in carryover is not likely.

#### The Price Situation and Outlook

The next chart (836) shows market prices at Kansas City and the loan rate. This brings out the fact, that since the inauguration of the price support program, prices generally have been close to the support rates. It also shows that prices at Kansas City have been lowest in either June, July or August and, as quantities were withdrawn under the support program from the general supplies, that prices advanced to a level near or above the support rate depending upon the tightness of the "free supplies". In most years, prices have averaged highest in March or later.

The trend in wheat prices this year has again been moderately upward from the low point following harvest when movement to market was heavy. In mid-October prices received by farmers average \$1.92, which was slightly below the effective loan rate and 6 cents below a year earlier.

Through October 15, 153 million bushels of 1957 wheat had been placed under the support programs, compared with 198 million on the same date a year earlier. With prices in most areas still below the effective price support level, sufficient additional quantities are expected to be put under support so that prices will continue the usual seasonal advance. As a result, the average price of wheat to farmers in 1957-58 may again average near the national support level of \$2.00 per bushel.

The minimum national average support price for 1958-crop wheat was announced on April 19, 1957 at \$1.78 per bushel. This price reflected 75 percent of estimated transitional parity, when announced in April 1957, and compares with \$2.00 for both 1956 and 1957. The minimum support will not be reduced but may be increased if a combination of the wheat parity price as of July 1, 1958 and the wheat supply relationships as of that date indicate a higher support price.

167

Wheat: Supply and distribution, United States, 1952-57  
and 1958 projected

Item	Year beginning July						
	1952	1953	1954	1955	1956	1957	1958
	<u>Mil.</u> <u>bu.</u>	<u>Mil.</u> <u>bu.</u>	<u>Mil.</u> <u>bu.</u>	<u>Mil.</u> <u>bu.</u>	<u>Mil.</u> <u>bu.</u>	<u>Mil.</u> <u>bu.</u>	<u>Mil.</u> <u>bu.</u>
Supply							
Carryover on July 1	256.0	605.5	933.5	1,036.2	1,033.4	908	851
Production	1,306.4	1,173.1	983.9	934.7	997.2	927	1,000
Imports <u>3/</u>	21.6	5.5	4.2	9.9	8.0	8	7
Total	<u>1,584.0</u>	<u>1,784.1</u>	<u>1,921.6</u>	<u>1,980.8</u>	<u>2,038.6</u>	<u>1,843</u>	<u>1,858</u>
Domestic disappearance							
Food <u>4/</u>	488.4	487.1	485.9	481.5	480.9	479	477
Seed	89.1	69.5	64.8	67.7	56.9	63	65
Industry	.2	.2	.2	.7	.5	---	---
Feed <u>5/</u>	83.0	76.8	60.1	51.4	42.7	50	60
Total	<u>660.7</u>	<u>633.6</u>	<u>611.0</u>	<u>601.3</u>	<u>581.0</u>	<u>592</u>	<u>602</u>
Exports <u>6/</u>	317.8	217.0	274.4	346.1	549.2	400	
Total disappearance	<u>978.5</u>	<u>850.6</u>	<u>885.4</u>	<u>947.4</u>	<u>1,130.2</u>	<u>992</u>	
Stocks on June 30	605.5	933.5	1,036.2	1,033.4	908.4	<u>7/851</u>	

1/ Preliminary.

2/ Projected.

3/ Excludes imports of wheat for milling-in-bond and export as flour.

4/ Includes shipments to United States territories and military food use at home and abroad.

5/ This is the residual figure, after all other disappearance is accounted for.

6/ Actual exports including those for civilian feeding under the military supply program.

7/ Tentative.



VISITING DELEGATES TO NATIONAL OUTLOOK CONFERENCE  
November 18 - 21, 1957

(Commercial Firms, Banks, Embassies, etc.)

Embassies

Jose Oscar Azar	Dominican Republic
Roger Coustry	Belgium
A. S. Tuinman	Netherlands
R. Soenadi	Indonesia
L. L. Roux	South Africa
R. A. Sherwin	Australia
Paul Grabo	Sweden
L. W. Crawford	Britain
W. Adair Stewart	Canada
W. D. Porter	Dominion Bureau of Statistics, Canada
P. Cossmann	Dept. of Agriculture, Canada
D. Ware	Dept. of Agriculture, Canada
J. Mann	Dept. of Agriculture, Canada
Rasmus Heggdal	Norway
D. J. Daly	Dept. of Trade and Commerce, Canada
Joshua Bernhardt	Dept. of Agriculture & Commerce, Puerto Rico
M. Rachlis	Dept. of Agriculture, Canada

Universities

George Luke	Rutgers
Labonia Hilbert	Maryland
H. C. Love	Houston, Texas
Vivian Curnutt	Maryland
D. D. Solomon	Maryland

Other

Jasper Burnett	Tennessee Valley Authority
John Webb	Maryland
John C. Webb	Maryland
Burnell Held	Resources for the Future, Washington
Howard Diesslin	Farm Foundation
Peyton Stapp	Bureau of the Budget
Manuel Helzner	National Planning Association
Walter B. Garver	Manager, Agric. Dept., U.S. Chamber of Commerce
Maurice M. Martin	Pennsylvania Dept. of Agriculture
Alvin N. Saylor	Pennsylvania Dept. of Agriculture
Dr. and Mrs. Henry C. Taylor	Former Chief, BAE, USDA

## VISITING DELEGATES

11/19/57

### Commercial Firms

Russell J. Davis  
John R. King  
George A. Slaphey  
F. E. Simmons  
Kermit Larson  
Francis C. Jones  
M. S. Williams  
George A. Fletcher  
R. N. Landreth  
Clifford Keirstead  
L. S. Fife  
K. E. Kinsinger  
Eli Ferguson  
Thomas M. Perkins  
Rudolph Gallat  
Kenneth Miller  
Robert E. Miller  
Robert Keeton  
L. M. Wood  
B. J. Bowlen  
Howard McClarren

Sidney Repplier  
Irving E. Hankin  
W. L. Fitzgerald  
Clay Ross  
Willard F. Watkins  
Alvin Oliver  
Dewey Bond  
John Cobbs  
J. R. Leal  
Ruth Cornette

Charles J. Orr  
L. T. Witherspoon  
Hilding Anderson

### Federal Reserve Banks

Harry Mitiguy  
Donald Snodgrass  
R. J. Doll  
Ernest Baughman  
Robert Worcester  
G. A. Peterson  
C. B. Luttrell  
Claude Hummel  
J. Z. Rowe  
Sada L. Clarke  
Arthur Kantner

Milk Producers Federation, Washington, D. C.  
Doane Agricultural Service  
Doane Agricultural Service  
American Viscose Corporation  
Oscar Mayer Co., Madison, Wisconsin  
Green Giant Co., LeSeuer, Wisconsin  
National Plant Food Institute  
Travelers Insurance Co., Hartford, Conn.  
Allis-Chalmers Mfg. Co., Washington, D. C.  
Glidden Company, Chicago, Ill.  
International Harvester Co., Chicago, Ill.  
Swift & Company  
Equitable Life Assurance Society  
Tractor & Implement Div., Ford Motor Co.  
Swift & Company  
Armor & Co., Chicago, Ill.  
Proctor & Gamble  
Proctor & Gamble  
Proctor & Gamble  
Caterpillar Tractor, Peoria, Ill.  
American Institute of Cooperation, Washington,  
D.C.  
Farm Journal  
Merrill Lynch, Pierce, Fenner & Beane, N.Y.  
Quaker Oats Company, Chicago, Ill.  
Carl Byoir and Associates, Washington, D.C.  
Olin Mathieson Chemical Corp.  
Grain and Feed Dealers National Association  
American Meat Institute, Washington, D. C.  
Business Week, New York City  
American Cyanamid Company  
Agricultural Food Chemistry Magazine, Washing-  
ton, D. C.  
Anderson Clayton & Company, Houston, Texas  
Spencer Chemical Company, Kansas City, Mo.  
Thomson McKinnon, New York

Boston  
San Francisco  
Kansas City  
Chicago  
Minneapolis  
Kansas City  
St. Louis  
Cleveland  
Dallas  
Richmond  
Atlanta

VISITING DELEGATES

11/19/57

Other Banks

John Hopkin  
Norman Urquhart  
Lawrence E. Kreider  
T. I. Norton

Bank of America  
First National City Bank of New York  
American Bankers Association  
Bank of Canada





THE WORLD ECONOMIC SITUATION  
IN 1957

Speech by John Evans

Outlook Conference, Dept. of Agriculture

November 18, 1957.





## THE WORLD ECONOMIC SITUATION

IN 1957

I am afraid I am going to be a great disappointment to those of my listeners who have failed to realize that I am neither an expert in matters agricultural nor a prophet. In order to concentrate as much as possible of your disappointment into the beginning of my talk let me make clear that I am not going to attempt to predict the course of future events either for the world as a whole or for individual countries. Even if I were able, it would be inappropriate for an officer of the State Department to do so. In saying this I am not suggesting that you run toward the nearest exit. Some of those who follow me will be in a position -- if not to predict -- at least to project. And if I have been able to fill in some background that will enable you to place their projections in perspective you may even find the next hour worth sitting through.

An hour isn't long for a tour around the world. Unless something has happened since I left my office this morning, the sputnik record for the course is still over two hours. So I'll only be able to touch at a few of the spots that seem to me worth a quick look. I propose to glance at the recent economic situation, in 1956 and as far into 1957 as my data -- all public -- will enable me to penetrate. Then, if there is time, I will try to identify some of the longer run forces which will at least play a part in shaping the course of world trade -- including trade in agricultural products -- in the future.

To save time let me dispose at once of my disclaimers and credits. I am not speaking for the Department of State! None of my facts and few of my interpretations will be original.

I will plagiarize heavily from publications of such organizations as the UN (particularly its World Economic Survey), GATT, CEEC, ECE, the IMF and FAO. I will not take time to identify my sources as I speak.

The first stop on our world tour -- and in many respects the most important stop -- is Western Europe. Europe has been

enjoying a boom.

enjoying a boom. The rates of industrial growth in 1956 were almost unprecedented. The resilience of European economies that was demonstrated during the United States recession in 1954 was demonstrated again in the way Europe rode out the Suez crisis and scarcely paused in its prodigious economic growth. Thus, by the end of 1956, Western Europe had given the lie to early post-war prophets of gloom. It had not only retained but strengthened its lead over all other areas of the world as the closest competitor of North America in standard of living and industrial production. But 1957 has brought troubles that may be worse than Suez. Speaking very generally the price of this rapid growth has been the emergence of serious inflationary pressures and a near-flood of imports. An overall current deficit with the dollar area has reappeared. -- though few are prepared to revive the old wives' tale about the existence of a structural dollar gap.

Through 1956 Europe continued to throw overboard post-war restrictions on trade and on international payments. But 1957 has seen one serious setback for commercial policy -- that is, in France. And that brings me to the obvious point that the differences between European countries, at least in respect of short term indicators of economic health, are almost as great as their similarities.

Let me try to draw some distinctions among them based on recent trends. It is not easy to cover in a few minutes the differences among the countries of Western Europe because of the multitude of comparisons that might be made. In an effort to bring some arbitrary order into chaos I have chosen three principal criteria around which to attempt some classification of the varying economies with which we are about to deal. In doing so I am certain to be guilty of over-simplification and I hope that some of the participants here will be sufficiently outraged to be moved to set the record straight before this conference is concluded. My criteria will be: the position of the countries' reserves, the current rate of economic growth, and the current trend in their foreign balances.

While I am not going to try to make any predictions on the basis of the following analysis, I am going to try to develop a few patterns -- and exceptions to them -- that should help in an understanding of what is going on in European economies.

One is the relationship



One is the relationship between the size of each country's foreign exchange reserves and the economic policies it is pursuing. Here the facts suggest that certain countries have been forced to retard their economic growth in order to protect those reserves. Another pattern that will develop is shown by the relationship between the rate of economic growth and the current balance of payments. The point to watch here is the extent to which in some countries recent growth has been achieved out of the internal resources of the economy and the extent to which in others it has been accompanied by a heavy import balance and a consequent draft on reserves. When these two comparisons are cast against a background of increasing inflationary pressures they form the basis for some conclusions -- which you will have to reach for yourselves -- as to the choices that the different countries of Europe are likely to make between continued rapid growth and international solvency.

Looking first at the cumulative position as represented by the size of the countries' reserves at the middle of 1957, a convenient basis for comparison is the size of gold and foreign exchange reserves of central banks and treasuries in terms of the number of months of imports they would cover. On this basis we can arbitrarily divide Western Europe into two groups. The first group ranks from Switzerland with 12 1/2 months reserves, through Germany, Austria and Italy, to Belgium with 4 months. At the top of the second group is the Netherlands with 3.3 months, followed by the UK, Sweden, and Norway. France and Denmark take the bottom position in this group with only 1.6 and 1.3 months respectively. While this ranking does not tell us much about the present direction of economic change in the countries concerned, it is vitally important because of its influence on the policies of each country. Clearly Germany and Italy are in a position to run economic risks that would be out of the question for France and Denmark.

My second classification is based on recent economic growth. The relatively unfavorable position of some countries as measured against this criterion is likely to be misleading if we overlook the fact that all of the countries with whom we are dealing have enjoyed substantial economic growth in recent years. But I want to focus our attention on the changes that took place in the year that ended

in the middle of 1957.



in the middle of 1957. On this basis we can distinguish four countries which have continued to boom. These are Austria, France, Italy, and Germany. The second group, consists of countries that have grown more slowly or have made no progress. Significantly, they are also those in which unemployment increased in the second quarter of 1957 as compared with a year earlier. Omitting Switzerland, for which I do not have the necessary data, these are: Norway, Sweden, Denmark, the UK, and the Netherlands.

My third grouping is based on the recent trend of foreign balances. For this purpose I have more or less arbitrarily selected the changes in the balances of each country in the European Payments Union in the first half of 1957. I believe this comparison will provide at least a rough indicator of their relative international competitive positions. In this recent period Germany and Austria increased their EPU gains, and France and Denmark fell further behind in the race for reserves. Germany's gains were incomparably greater than those of Austria, however, and the losses of France were far greater than the losses of all other deficit countries combined. Of the remaining countries Italy, Belgium, and the Netherlands lost ground in the EPU, while the UK, Sweden, and Norway made modest gains. (This comparison, of course, does not take into account some very important speculative movements in the second half of 1957. I'll have more to say about them later).

If these three groupings are combined, the following picture begins to emerge:

- 1 - For two countries, all the indicators of recent performance are favorable. They have large reserves, a present favorable EPU balance, and are enjoying rapid economic growth. These are Germany and Austria.
- 2 - At the other extreme is one country with dangerously low reserves, a present unfavorable balance and a relatively low level of economic activity and increased unemployment. That is Denmark.
- 3 - Then we can pick out two countries which contrast a very high level of current activity and growth with unfavorable current EPU balances. But

these two countries

these two countries are not by any means in similar positions. The first of them, Italy, is running a relatively small EPU deficit and has very substantial reserves. Also, its gold and dollar reserves -- as contrasted with its EPU balance -- showed a modest increase. The other is France, which in one year incurred a deficit of over half a billion dollars in the EPU and which has gold and dollar reserves so low that any further loss would be serious.

- 4 - The remaining countries have all had a low rate of growth during the past year. But there the resemblance ends. For the two Benelux countries registered a negative EPU balance against fairly comfortable reserves, while the UK, Sweden, and Norway, with low reserves, registered some improvement.

For the countries in the last group I have mentioned, namely the UK, Sweden, and Norway, there appears to be a direct relationship between the low rate of economic activity in the past year and the improvement in their European balances during the first half of 1957. In all three it would appear that the favorable balance resulted from a reduction of imports, induced at least in part by the low rate of business and industrial activity, rather than from an increase in exports. On the other hand, the business and industrial boom enjoyed in France, and the high rate of investment in that country, at least partially account for the heavy import balance and the dramatic drains on France's reserves, intensified by the demands arising from the military action in Algeria.

This analysis cannot be carried beyond a certain point, however. For Germany is the outstanding case of a country having a high level of activity and a heavy rate of investment but which nevertheless has been able to continue to earn prodigious balances in its foreign transactions, while the stagnation of Denmark has not enabled that country to bring its current accounts into balance.

To round out this over-simplified picture of economic trends in Western Europe -- a word about inflation. Up to the end of 1955 Europe had succeeded in maintaining surprisingly

stable prices



stable prices in the light of its rapid economic growth. The greatest increase in the cost of living index was that of Austria, with a rise of 48% over 1950 -- the lowest Switzerland, with only 8%. France, in spite of its rapid growth, had a 30% rise. But 1956 saw increasing pressure. The French cost of living index advanced 8% in the year and that of Germany even more -- 9%. In 1957, as we will see, the trend was accelerated, particularly in France.

A subject on which an endless amount of interesting speculation would be possible would be the relationship between the economic positions of the countries in Western Europe and their commercial policy.

The last two years have seen an encouraging trend toward more liberal trade policies in Europe -- in spite of the recent reversal in that trend in the case of France. Both in 1956 and in 1957 the Western European countries in general moved nearer to the goal of multilateral trade. Liberalization within the OEEC was carried further, with all but Denmark, France, and Norway having achieved the OEEC goal of 90% liberalization. In percentage terms removal of restrictions on imports from the dollar area proceeded even faster than the freeing of intra-European trade. However, a "hard core" of protective quantitative restrictions in both fields remains, including restrictions on agricultural products.

Most Western European countries also made progress in dismantling their bilateral payments agreements and, except in their dealings with the countries of the Sino-Soviet Bloc, had made the plunge into multilateral balancing of trade. Following the broadened transferability of sterling and the Deutschmark that had been established earlier, the period saw the inauguration of increased transferability for the Belgian franc, the Italian lira, the Netherlands' guilder, and the Swedish krona.

In spite of all this progress there remains a major exception to the adoption by Europe of liberal and competitive trading -- or rather two exceptions which are aspects of the same problem. Nearly every European country still conducts part of its trade through state trading entities -- the percentages in six countries running above 20% of total trade. Trade conducted in this way is omitted from the calculations of trade liberalization in OEEC

or with the dollar area.



or with the dollar area. Much the largest concentration of state trading is in the field of agricultural products. Thus, state trading is largely an aspect of another problem, the persistence of protectionism for domestic agriculture and the use of a diversity of ingenious devices -- of which state trading is only one -- to maintain and even increase often uneconomic farm production.

That stubborn fact almost inevitably suggests the need for some discussion of the European Common Market and the proposed Free Trade Area. I am afraid we simply haven't enough time. But let me touch on one aspect of a very complicated subject.

Those of you who have not followed these developments closely may have wondered whether, and if so how, the United States may be tied into these institutions. The United States will not, of course, be a party to the Common Market Treaty which will come into effect next January among the same six European countries which are members of the European Coal and Steel Community. The larger grouping of European countries under a Free Trade Area is, of course, only a prospect at the moment, and efforts to work out its provisions are proceeding actively in the OEEC, of which the United States and Canada are associate members. In the OEEC both these countries have a platform from which to express their views about the provisions of the FTA treaty. But the principal medium for the protection of the interests of United States trade is the GATT. All the members of the Common Market are Contracting Parties to the GATT, as will be most, if not all, the members of the Free Trade Area.

The Common Market Treaty explicitly recognizes that prior obligations, such as those under the GATT, will be observed. If non-members of the Common Market or Free Trade Area believe that these regional arrangements are contrary to those obligations, they have -- if they are members of the GATT -- a means for seeking their modification.

A little later I want to complete this picture of Europe with some of the latest developments. But let me first continue the quick trip around the world. In order to dispose of the only other major industrial country in the Free World outside of North America, let us look first at Japan.

In 1956 Japan

In 1956 Japan enjoyed the most rapid growth in industrial production of any country -- even greater than that of France -- an increase of some 20% over 1955, which in itself had been a year of very respectable growth. In 1956 Japan's exports increased by 20%. But, largely as a result of rapid increase in credit expansion and investments and a further relaxation of import restrictions, imports grew even more rapidly -- by 30%. As a result, Japan's gold and dollar reserves declined by over \$300 million in the first half of 1957. In an effort to arrest this trend and increasing inflationary pressures, the Bank of Japan raised the bank rate to the unusually high level of 8.40% in May of this year.

It is obviously impossible in this brief hour to touch at all the scores of countries that make up what may very loosely be described as the underdeveloped countries -- that is, all the countries of Asia, except Japan, and of Africa and Latin America, but excluding the Southern Hemisphere members of the British Commonwealth. What I shall do is to try to identify some of the economic trends that are common to most of them and then point out some of the important distinctions among them.

Since the war the populations of all but the least sophisticated of these countries have become aware as never before of the vast gulf that separates their standards of living from that of the industrial countries. As a result, nearly every country has adopted as a prime national objective the goal of rapid economic development. Combined with this drive, particularly in former colonial areas, has been the growth of economic nationalism, with its own bias in favor of economic diversification and industrial self-sufficiency.

The resulting impetus toward economic revolution has been intensified by unprecedented population growth which has threatened at spots to nullify in per capita terms whatever success these economic development programs may have achieved. In the underdeveloped countries of the world since the war the typical pattern of population growth -- almost wholly as a result of the decline in death rates -- has been about 1 1/2% per year, or around the rate of the United States and the British Dominions, but much higher than Western Europe. In certain areas, however, including most of tropical Latin America and parts of South East Asia, the rate is

between 2 1/2 and 3%.



between 2 1/2 and 3%.

Against these population growths, most underdeveloped countries have been unable to increase their real per capita gross product as rapidly as that of the industrial countries, and the gap in living standards has continued to widen, although there have been increases in actual living levels in many of them. At the same time, the tendency has been for the exports of these countries to fail to keep pace with their growing requirements for imports. This tendency can be laid to: (1) growth in food and other primary production in the industrial countries, and (2) population growth and greater internal demand, especially for food.

When we come to take a closer look at economic trends in these countries some very important differences appear. Here again let me attempt a rough classification of some of the principal countries. For this purpose I am going to abandon the term "underdeveloped country" and use the broader expression "primary exporting country", which will include Australia, New Zealand, and South Africa. As in the case of Western Europe, a grouping of these countries according to some of their common economic characteristics reveals certain patterns that should help our understanding. The picture that emerges is one of economies ranging from the dynamic to the stagnant. But the group of countries enjoying relatively rapid growth divide fairly sharply between those which have been able to increase their exports substantially and those whose economic growth has been achieved at the cost of depletion of foreign reserves and inflation.

The UN distinguishes a number of primary exporting countries which, since 1948, have enjoyed the greatest rate of growth in real product: In Latin America - Brazil, Colombia, Mexico, Peru and Venezuela; in Asia - Ceylon, Iraq, Malaya, Thailand, Indonesia, and the Philippines. In addition, the three southern Commonwealth countries have also had rates of growth comparable with these other leaders. Most of these countries have also enjoyed a more than average expansion of their exports, either because of increased volume or high prices. On the other hand, the exports of countries with lower rates of growth, such as Argentina, Cuba, Burma, Egypt, India, and Pakistan, have been relatively stagnant.

When these countries



When these countries are grouped in accordance with the pressures on their external balances an interesting pattern emerges. Again drawing on the UN we can distinguish those countries whose reserves are under increasing pressure and those whose reserve position is improving. And when this classification is combined with that based on the rate of economic growth we come up with three groups which are illuminating.

The first group consists of those countries whose reserves are under pronounced pressure, but which have enjoyed better than average growth. These are: Brazil, Colombia, Peru, Thailand, Indonesia, Australia, and New Zealand.

The second group comprises those countries whose reserves are under pressure, but which have enjoyed only slow growth: Argentina, Cuba, Egypt, Burma, India, and Pakistan.

The third group, those with easy reserve positions and rapid growth -- and note the happy oil producers -- are: Mexico, Venezuela, Iraq, Ceylon, Malaya, and South Africa.

Now, let us look at the experience of each group with inflation. The countries which have achieved rapid growth in spite of pressure on their reserves sustained an increase in their cost of living from 1948-49 to 1953-55 ranging from 40% for New Zealand and Thailand to 150% for Indonesia. The third-group, which combined rapid growth and an easy balance of payments position suffered a cost of living inflation ranging from 10% to 50%. But the group that was subject to balance of payments pressures and did not enjoy rapid growth almost completely avoided inflation -- up to 1953 -- with an actual reduction in two cases and a maximum increase of 10%.

A few words of explanation about these groupings. The countries which have not felt serious pressure on their reserves were those which in general enjoyed the best export records and were able to increase their imports with impunity. But those which did not feel much pressure did not necessarily lose exchange. For some, faced with unfavorable export markets, protected their reserves by rigid import and exchange controls. They were, for the most part, the countries in our second group, which paid the price of reduced economic growth.

Let me repeat

Let me repeat that these comparisons are based on the situation at the beginning of 1956. The year 1956 saw some changes in relative positions. The greatest increases in Gross Domestic Product were recorded by two metal exporters: Rhodesia-Nyassaland and the Belgian Congo; an oil exporter, Venezuela; and two sugar producers, Cuba and the Dominican Republic. The poorest record of growth, however, includes one of the former laggards, Pakistan, and three new entries, Australia, Ceylon, and Indonesia. But the most important change during the year was in the position of India, which had started the period with fairly comfortable reserves. India lost exchange so heavily as seriously to endanger the prospects for carrying through her ambitious five-year plan for economic development.

A word about the character of economic growth in the primary producing countries. Agriculture, mining, manufacturing have all shared. But in the rapid growth countries manufacturing grew more rapidly than agriculture. In fact, it would appear from the import figures that few of the rapidly developing countries have increased their agricultural production fast enough to keep up with the growth in their per capita national income. The volume of food imports has increased over 1948 in almost all the rapidly developing countries, the increase being most rapid in Brazil, Chile, Iraq, Burma, and Ceylon. But food imports fell in all the countries the UN Classifies as relatively stagnant.

It has not been part of my plan to include the countries of the Sino-Soviet Bloc in this survey. But the picture of the underdeveloped countries would not be complete without some mention of the campaign of trade and aid that the Bloc has been conducting, very selectively, with those countries. Credits to outside countries are, so far, small compared with credits and grants by the United States, but for some countries they have been appreciable. Also, the resulting totals of trade are small as compared with the external trade of the United States or Europe, but the last few years have seen significant increases both in Bloc exports to and Bloc imports from the rest of the world; Bloc imports from a number of countries now represent a substantial part of their total exports. In this group are: Yugoslavia, Egypt, Iceland, Iran, Burma, Afghanistan, and Turkey.

So far, the significance of Bloc trade lies less in the amounts involved than in the manner in which it can be manipulated by

communist countries



communist countries for political advantage. The absence of capitalist cost-pricing has permitted Communist China to sell goods at less than cost to Japan's normal markets in South East Asia, and the Soviet Union to buy surplus Egyptian cotton without regard to normal marketing factors. Because normal economic criteria are of little help in determining the flow of this trade it introduces an element of uncertainty into world trade patterns that can be disadvantageous not only to trading nations whose exports are indirectly affected but to the countries which, in the first instance, appear to be the beneficiaries. Fortunately, there are signs that some of the latter realize this fact and would prefer to sell their food and raw material exports to the free world when they can find a market there.

I have concentrated this survey on periods of time for which enough data is available to permit valid comparisons. But I think you are entitled to some roundup of the latest significant developments. The outside world turned from a surplus to a deficit balance of payments position vis-a-vis the United States in the fourth quarter of 1956, and the balance continued adverse in the first half of 1957. Although this affected various countries in different degrees and resulted partly from unusual, non-recurring factors (the Suez crisis, the 1956 freeze in Europe, restocking of cotton in 1956-57, etc.), the net effect on foreign countries' dollar reserves was unfavorable. If we allow for seasonal factors and disregard exceptional United States payments of about \$300 million to Venezuela for oil exploration rights, foreign countries lost about \$400 million during the second quarter of 1957 as a result of their transactions with the United States.

During the summer and early autumn of 1957 there have been unusually strong currents of exchange speculation. First France came under pressure and was forced in mid-August to make a partial exchange-rate adjustment. This, however, only temporarily checked the speculative drain and failed to bring about the hoped for massive return of funds. Recently, renewed pressure led the caretaker French government to complete what, by any definition except the formal one, was a devaluation of the franc.

Meanwhile, the brunt of bear speculation against the existing exchange rate structure had shifted to the UK and, to a lesser but still substantial degree, to the Netherlands, Belgium, and some other countries. The obverse of this speculation was reflected in

an unprecedented influx



an unprecedented influx of funds into Germany. Following the sharp rise in the Bank of England's discount rate (on September 19), sterling strengthened, and the movement of reserves from the UK to Germany has since been reversed. Nevertheless, the foreign exchanges are still in an unsettled condition, and gold and exchange reserves in Europe, while perhaps adequate in total, are clearly inadequate in the case of several major trading countries.

Some countries which depend on exports of one or two primary products for most of their foreign exchange income have been faced in the last several months with sharp declines in the markets for a number of world-traded commodities, notably non-ferrous metals. The post-Suez flattening of the growth curve of world petroleum requirements has interrupted the rise in oil revenues of the Middle East. Weakness of commodity markets not only restricts the buying power of individual primary producing countries; it could also have an impact on the foreign exchange earnings of the sterling area and of Belgium. In the case of the sterling area, to be sure, high receipts from wool and cocoa have in some degree offset losses of earnings from weaker commodities, and, of course, Europe in general stands to benefit, terms-of-trade wise, from lower import costs.

There are others here who will be in a better position than I to predict the course of commodity markets. But it is not an easy task even for the expert, for along with all the other variables, they must take into consideration the level of business activity in the United States.

I have already mentioned that the pace of economic development in many countries -- but certainly not all -- has stimulated imports beyond their capacity to earn foreign exchange. In recent months this tendency has been most acutely felt in France and Japan among the industrialized countries and India and Brazil among the primary exporters. But more generally there are signs that the extremely rapid growth of the past few years must slow down either as the forces that sparked that growth lose their momentum, or as countries find it necessary to apply the brakes through fiscal, monetary, and credit policy.

It is significant and encouraging that there has been no rush by foreign governments to tighten or reimpose import or exchange

controls

controls nor to single out United States or dollar-area products for discrimination. Moreover, there has been a general preference for combatting inflation and speculation by indirect controls operating through fiscal, monetary, and credit policy rather than by direct controls operating through the rationing of goods, capital, and foreign exchange.

These are encouraging signs -- signs that most of the world realizes that its recent twinges are growing pains and not symptoms of the paralysis suggested by the concept of a dollar gap.

It might be wiser for me to end on that optimistic note. But it seems to me there is a more interesting lesson to be drawn from some of these observations. The people of underdeveloped countries are demanding increases in their standards of living. There is almost no limit to their potential demand for consumers goods, including food. The pressures on their governments are almost certain to force programs for economic development that will keep their economies under inflationary stress.

To the extent that they can sell their exports in the United States and elsewhere they will ease that stress by imports, including imports of food in many cases. If their export markets are inadequate they will be forced to devote the major part of their own development efforts to increasing food production at home. Given their present abysmally low levels of per capita income and explosive population growth the limits of appetite are not likely to be reached in our lifetime. The demand for higher standards of living will not be satisfied by home production and imports combined. If the industrial countries of the Western World want to see the growth of healthy and useful countries in Asia and Africa they can both encourage those countries to develop their domestic production and make it possible for them to increase their imports. There will be plenty of room for both.

**THE WORLD ECONOMIC SITUATION**  
**IN 1957**

**Speech by John Evans**

**Outlook Conference , Dept. of Agriculture**

**November 18 , 1957 .**



U

# THE WORLD ECONOMIC SITUATION

IN 1957

I am afraid I am going to be a great disappointment to those of my listeners who have failed to realize that I am neither an expert in matters agricultural nor a prophet. In order to concentrate as much as possible of your disappointment into the beginning of my talk let me make clear that I am not going to attempt to predict the course of future events either for the world as a whole or for individual countries. Even if I were able, it would be inappropriate for an officer of the State Department to do so. In saying this I am not suggesting that you run toward the nearest exit. Some of those who follow me will be in a position -- if not to predict -- at least to project. And if I have been able to fill in some background that will enable you to place their projections in perspective you may even find the next hour worth sitting through.

An hour isn't long for a tour around the world. Unless something has happened since I left my office this morning, the sputnik record for the course is still over two hours. So I'll only be able to touch at a few of the spots that seem to me worth a quick look. I propose to glance at the recent economic situation, in 1956 and as far into 1957 as my data -- all public -- will enable me to penetrate. Then, if there is time, I will try to identify some of the longer run forces which will at least play a part in shaping the course of world trade -- including trade in agricultural products -- in the future.

To save time let me dispose at once of my disclaimers and credits. I am not speaking for the Department of State! None of my facts and few of my interpretations will be original.

I will plagiarize heavily from publications of such organizations as the UN (particularly its World Economic Survey), GATT, CEEC, ECE, the IMF and FAO. I will not take time to identify my sources as I speak.

The first stop on our world tour -- and in many respects the most important stop -- is Western Europe. Europe has been

enjoying a boom.

enjoying a boom. The rates of industrial growth in 1956 were almost unprecedented. The resilience of European economies that was demonstrated during the United States recession in 1954 was demonstrated again in the way Europe rode out the Suez crisis and scarcely paused in its prodigious economic growth. Thus, by the end of 1956, Western Europe had given the lie to early post-war prophets of gloom. It had not only retained but strengthened its lead over all other areas of the world as the closest competitor of North America in standard of living and industrial production. But 1957 has brought troubles that may be worse than Suez. Speaking very generally the price of this rapid growth has been the emergence of serious inflationary pressures and a near-flood of imports. An overall current deficit with the dollar area has reappeared. -- though few are prepared to revive the old wives' tale about the existence of a structural dollar gap.

Through 1956 Europe continued to throw overboard post-war restrictions on trade and on international payments. But 1957 has seen one serious setback for commercial policy -- that is, in France. And that brings me to the obvious point that the differences between European countries, at least in respect of short term indicators of economic health, are almost as great as their similarities.

Let me try to draw some distinctions among them based on recent trends. It is not easy to cover in a few minutes the differences among the countries of Western Europe because of the multitude of comparisons that might be made. In an effort to bring some arbitrary order into chaos I have chosen three principal criteria around which to attempt some classification of the varying economies with which we are about to deal. In doing so I am certain to be guilty of over-simplification and I hope that some of the participants here will be sufficiently outraged to be moved to set the record straight before this conference is concluded. My criteria will be: the position of the countries' reserves, the current rate of economic growth, and the current trend in their foreign balances.

While I am not going to try to make any predictions on the basis of the following analysis, I am going to try to develop a few patterns -- and exceptions to them -- that should help in an understanding of what is going on in European economies.

One is the relationship



One is the relationship between the size of each country's foreign exchange reserves and the economic policies it is pursuing. Here the facts suggest that certain countries have been forced to retard their economic growth in order to protect those reserves. Another pattern that will develop is shown by the relationship between the rate of economic growth and the current balance of payments. The point to watch here is the extent to which in some countries recent growth has been achieved out of the internal resources of the economy and the extent to which in others it has been accompanied by a heavy import balance and a consequent draft on reserves. When these two comparisons are cast against a background of increasing inflationary pressures they form the basis for some conclusions -- which you will have to reach for yourselves -- as to the choices that the different countries of Europe are likely to make between continued rapid growth and international solvency.

Looking first at the cumulative position as represented by the size of the countries' reserves at the middle of 1957, a convenient basis for comparison is the size of gold and foreign exchange reserves of central banks and treasuries in terms of the number of months of imports they would cover. On this basis we can arbitrarily divide Western Europe into two groups. The first group ranks from Switzerland with 12 1/2 months reserves, through Germany, Austria and Italy, to Belgium with 4 months. At the top of the second group is the Netherlands with 3.3 months, followed by the UK, Sweden, and Norway. France and Denmark take the bottom position in this group with only 1.6 and 1.3 months respectively. While this ranking does not tell us much about the present direction of economic change in the countries concerned, it is vitally important because of its influence on the policies of each country. Clearly Germany and Italy are in a position to run economic risks that would be out of the question for France and Denmark.

My second classification is based on recent economic growth. The relatively unfavorable position of some countries as measured against this criterion is likely to be misleading if we overlook the fact that all of the countries with whom we are dealing have enjoyed substantial economic growth in recent years. But I want to focus our attention on the changes that took place in the year that ended

in the middle of 1957.

in the middle of 1957. On this basis we can distinguish four countries which have continued to boom. These are Austria, France, Italy, and Germany. The second group, consists of countries that have grown more slowly or have made no progress. Significantly, they are also those in which unemployment increased in the second quarter of 1957 as compared with a year earlier. Omitting Switzerland, for which I do not have the necessary data, these are: Norway, Sweden, Denmark, the UK, and the Netherlands.

My third grouping is based on the recent trend of foreign balances. For this purpose I have more or less arbitrarily selected the changes in the balances of each country in the European Payments Union in the first half of 1957. I believe this comparison will provide at least a rough indicator of their relative international competitive positions. In this recent period Germany and Austria increased their EPU gains, and France and Denmark fell further behind in the race for reserves. Germany's gains were incomparably greater than those of Austria, however, and the losses of France were far greater than the losses of all other deficit countries combined. Of the remaining countries Italy, Belgium, and the Netherlands lost ground in the EPU, while the UK, Sweden, and Norway made modest gains. (This comparison, of course, does not take into account some very important speculative movements in the second half of 1957. I'll have more to say about them later).

If these three groupings are combined, the following picture begins to emerge:

- 1 - For two countries, all the indicators of recent performance are favorable. They have large reserves, a present favorable EPU balance, and are enjoying rapid economic growth. These are Germany and Austria.
- 2 - At the other extreme is one country with dangerously low reserves, a present unfavorable balance and a relatively low level of economic activity and increased unemployment. That is Denmark.
- 3 - Then we can pick out two countries which contrast a very high level of current activity and growth with unfavorable current EPU balances. But

these two countries



these two countries are not by any means in similar positions. The first of them, Italy, is running a relatively small EPU deficit and has very substantial reserves. Also, its gold and dollar reserves -- as contrasted with its EPU balance -- showed a modest increase. The other is France, which in one year incurred a deficit of over half a billion dollars in the EPU and which has gold and dollar reserves so low that any further loss would be serious.

- 4 - The remaining countries have all had a low rate of growth during the past year. But there the resemblance ends. For the two Benelux countries registered a negative EPU balance against fairly comfortable reserves, while the UK, Sweden, and Norway, with low reserves, registered some improvement.

For the countries in the last group I have mentioned, namely the UK, Sweden, and Norway, there appears to be a direct relationship between the low rate of economic activity in the past year and the improvement in their European balances during the first half of 1957. In all three it would appear that the favorable balance resulted from a reduction of imports, induced at least in part by the low rate of business and industrial activity, rather than from an increase in exports. On the other hand, the business and industrial boom enjoyed in France, and the high rate of investment in that country, at least partially account for the heavy import balance and the dramatic drains on France's reserves, intensified by the demands arising from the military action in Algeria.

This analysis cannot be carried beyond a certain point, however. For Germany is the outstanding case of a country having a high level of activity and a heavy rate of investment but which nevertheless has been able to continue to earn prodigious balances in its foreign transactions, while the stagnation of Denmark has not enabled that country to bring its current accounts into balance.

To round out this over-simplified picture of economic trends in Western Europe -- a word about inflation. Up to the end of 1955 Europe had succeeded in maintaining surprisingly

stable prices



stable prices in the light of its rapid economic growth. The greatest increase in the cost of living index was that of Austria, with a rise of 48% over 1950 -- the lowest Switzerland, with only 8%. France, in spite of its rapid growth, had a 30% rise. But 1956 saw increasing pressure. The French cost of living index advanced 8% in the year and that of Germany even more -- 9%. In 1957, as we will see, the trend was accelerated, particularly in France.

A subject on which an endless amount of interesting speculation would be possible would be the relationship between the economic positions of the countries in Western Europe and their commercial policy.

The last two years have seen an encouraging trend toward more liberal trade policies in Europe -- in spite of the recent reversal in that trend in the case of France. Both in 1956 and in 1957 the Western European countries in general moved nearer to the goal of multilateral trade. Liberalization within the OEEC was carried further, with all but Denmark, France, and Norway having achieved the OEEC goal of 90% liberalization. In percentage terms removal of restrictions on imports from the dollar area proceeded even faster than the freeing of intra-European trade. However, a "hard core" of protective quantitative restrictions in both fields remains, including restrictions on agricultural products.

Most Western European countries also made progress in dismantling their bilateral payments agreements and, except in their dealings with the countries of the Sino-Soviet Bloc, had made the plunge into multilateral balancing of trade. Following the broadened transferability of sterling and the Deutschmark that had been established earlier, the period saw the inauguration of increased transferability for the Belgian franc, the Italian lira, the Netherlands' guilder, and the Swedish krona.

In spite of all this progress there remains a major exception to the adoption by Europe of liberal and competitive trading -- or rather two exceptions which are aspects of the same problem. Nearly every European country still conducts part of its trade through state trading entities -- the percentages in six countries running above 20% of total trade. Trade conducted in this way is omitted from the calculations of trade liberalization in OEEC

or with the dollar area.

or with the dollar area. Much the largest concentration of state trading is in the field of agricultural products. Thus, state trading is largely an aspect of another problem, the persistence of protectionism for domestic agriculture and the use of a diversity of ingenious devices -- of which state trading is only one -- to maintain and even increase often uneconomic farm production.

That stubborn fact almost inevitably suggests the need for some discussion of the European Common Market and the proposed Free Trade Area. I am afraid we simply haven't enough time. But let me touch on one aspect of a very complicated subject.

Those of you who have not followed these developments closely may have wondered whether, and if so how, the United States may be tied into these institutions. The United States will not, of course, be a party to the Common Market Treaty which will come into effect next January among the same six European countries which are members of the European Coal and Steel Community. The larger grouping of European countries under a Free Trade Area is, of course, only a prospect at the moment, and efforts to work out its provisions are proceeding actively in the OEEC, of which the United States and Canada are associate members. In the OEEC both these countries have a platform from which to express their views about the provisions of the FTA treaty. But the principal medium for the protection of the interests of United States trade is the GATT. All the members of the Common Market are Contracting Parties to the GATT, as will be most, if not all, the members of the Free Trade Area.

The Common Market Treaty explicitly recognizes that prior obligations, such as those under the GATT, will be observed. If non-members of the Common Market or Free Trade Area believe that these regional arrangements are contrary to those obligations, they have -- if they are members of the GATT -- a means for seeking their modification.

A little later I want to complete this picture of Europe with some of the latest developments. But let me first continue the quick trip around the world. In order to dispose of the only other major industrial country in the Free World outside of North America, let us look first at Japan.

In 1956 Japan



In 1956 Japan enjoyed the most rapid growth in industrial production of any country -- even greater than that of France -- an increase of some 20% over 1955, which in itself had been a year of very respectable growth. In 1956 Japan's exports increased by 20%. But, largely as a result of rapid increase in credit expansion and investments and a further relaxation of import restrictions, imports grew even more rapidly -- by 30%. As a result, Japan's gold and dollar reserves declined by over \$300 million in the first half of 1957. In an effort to arrest this trend and increasing inflationary pressures, the Bank of Japan raised the bank rate to the unusually high level of 8.40% in May of this year.

It is obviously impossible in this brief hour to touch at all the scores of countries that make up what may very loosely be described as the underdeveloped countries -- that is, all the countries of Asia, except Japan, and of Africa and Latin America, but excluding the Southern Hemisphere members of the British Commonwealth. What I shall do is to try to identify some of the economic trends that are common to most of them and then point out some of the important distinctions among them.

Since the war the populations of all but the least sophisticated of these countries have become aware as never before of the vast gulf that separates their standards of living from that of the industrial countries. As a result, nearly every country has adopted as a prime national objective the goal of rapid economic development. Combined with this drive, particularly in former colonial areas, has been the growth of economic nationalism, with its own bias in favor of economic diversification and industrial self-sufficiency.

The resulting impetus toward economic revolution has been intensified by unprecedented population growth which has threatened at spots to nullify in per capita terms whatever success these economic development programs may have achieved. In the underdeveloped countries of the world since the war the typical pattern of population growth -- almost wholly as a result of the decline in death rates -- has been about 1 1/2% per year, or around the rate of the United States and the British Dominions, but much higher than Western Europe. In certain areas, however, including most of tropical Latin America and parts of South East Asia, the rate is

between 2 1/2 and 3%.



between 2 1/2 and 3%.

Against these population growths, most underdeveloped countries have been unable to increase their real per capita gross product as rapidly as that of the industrial countries, and the gap in living standards has continued to widen, although there have been increases in actual living levels in many of them. At the same time, the tendency has been for the exports of these countries to fail to keep pace with their growing requirements for imports. This tendency can be laid to: (1) growth in food and other primary production in the industrial countries, and (2) population growth and greater internal demand, especially for food.

When we come to take a closer look at economic trends in these countries some very important differences appear. Here again let me attempt a rough classification of some of the principal countries. For this purpose I am going to abandon the term "underdeveloped country" and use the broader expression "primary exporting country", which will include Australia, New Zealand, and South Africa. As in the case of Western Europe, a grouping of these countries according to some of their common economic characteristics reveals certain patterns that should help our understanding. The picture that emerges is one of economies ranging from the dynamic to the stagnant. But the group of countries enjoying relatively rapid growth divide fairly sharply between those which have been able to increase their exports substantially and those whose economic growth has been achieved at the cost of depletion of foreign reserves and inflation.

The UN distinguishes a number of primary exporting countries which, since 1948, have enjoyed the greatest rate of growth in real product: In Latin America - Brazil, Colombia, Mexico, Peru and Venezuela; in Asia - Ceylon, Iraq, Malaya, Thailand, Indonesia, and the Philippines. In addition, the three southern Commonwealth countries have also had rates of growth comparable with these other leaders. Most of these countries have also enjoyed a more than average expansion of their exports, either because of increased volume or high prices. On the other hand, the exports of countries with lower rates of growth, such as Argentina, Cuba, Burma, Egypt, India, and Pakistan, have been relatively stagnant.

When these countries

When these countries are grouped in accordance with the pressures on their external balances an interesting pattern emerges. Again drawing on the UN we can distinguish those countries whose reserves are under increasing pressure and those whose reserve position is improving. And when this classification is combined with that based on the rate of economic growth we come up with three groups which are illuminating.

The first group consists of those countries whose reserves are under pronounced pressure, but which have enjoyed better than average growth. These are: Brazil, Colombia, Peru, Thailand, Indonesia, Australia, and New Zealand.

The second group comprises those countries whose reserves are under pressure, but which have enjoyed only slow growth: Argentina, Cuba, Egypt, Burma, India, and Pakistan.

The third group, those with easy reserve positions and rapid growth -- and note the happy oil producers -- are: Mexico, Venezuela, Iraq, Ceylon, Malaya, and South Africa.

Now, let us look at the experience of each group with inflation. The countries which have achieved rapid growth in spite of pressure on their reserves sustained an increase in their cost of living from 1948-49 to 1953-55 ranging from 40% for New Zealand and Thailand to 150% for Indonesia. The third group, which combined rapid growth and an easy balance of payments position suffered a cost of living inflation ranging from 10% to 50%. But the group that was subject to balance of payments pressures and did not enjoy rapid growth almost completely avoided inflation -- up to 1956 -- with an actual reduction in two cases and a maximum increase of 10%.

A few words of explanation about these groupings. The countries which have not felt serious pressure on their reserves were those which in general enjoyed the best export records and were able to increase their imports with impunity. But those which did not feel much pressure did not necessarily lose exchange. For some, faced with unfavorable export markets, protected their reserves by rigid import and exchange controls. They were, for the most part, the countries in our second group, which paid the price of reduced economic growth.

Let me repeat



Let me repeat that these comparisons are based on the situation at the beginning of 1956. The year 1956 saw some changes in relative positions. The greatest increases in Gross Domestic Product were recorded by two metal exporters: Rhodesia-Nyassaland and the Belgian Congo; an oil exporter, Venezuela; and two sugar producers, Cuba and the Dominican Republic. The poorest record of growth, however, includes one of the former laggards, Pakistan, and three new entries, Australia, Ceylon, and Indonesia. But the most important change during the year was in the position of India, which had started the period with fairly comfortable reserves. India lost exchange so heavily as seriously to endanger the prospects for carrying through her ambitious five-year plan for economic development.

A word about the character of economic growth in the primary producing countries. Agriculture, mining, manufacturing have all shared. But in the rapid growth countries manufacturing grew more rapidly than agriculture. In fact, it would appear from the import figures that few of the rapidly developing countries have increased their agricultural production fast enough to keep up with the growth in their per capita national income. The volume of food imports has increased over 1948 in almost all the rapidly developing countries, the increase being most rapid in Brazil, Chile, Iraq, Burma, and Ceylon. But food imports fell in all the countries the UN Classifies as relatively stagnant.

It has not been part of my plan to include the countries of the Sino-Soviet Bloc in this survey. But the picture of the underdeveloped countries would not be complete without some mention of the campaign of trade and aid that the Bloc has been conducting, very selectively, with those countries. Credits to outside countries are, so far, small compared with credits and grants by the United States, but for some countries they have been appreciable. Also, the resulting totals of trade are small as compared with the external trade of the United States or Europe, but the last few years have seen significant increases both in Bloc exports to and Bloc imports from the rest of the world; Bloc imports from a number of countries now represent a substantial part of their total exports. In this group are: Yugoslavia, Egypt, Iceland, Iran, Burma, Afghanistan, and Turkey.

So far, the significance of Bloc trade lies less in the amounts involved than in the manner in which it can be manipulated by

communist countries



communist countries for political advantage. The absence of capitalist cost-pricing has permitted Communist China to sell goods at less than cost to Japan's normal markets in South East Asia, and the Soviet Union to buy surplus Egyptian cotton without regard to normal marketing factors. Because normal economic criteria are of little help in determining the flow of this trade it introduces an element of uncertainty into world trade patterns that can be disadvantageous not only to trading nations whose exports are indirectly affected but to the countries which, in the first instance, appear to be the beneficiaries. Fortunately, there are signs that some of the latter realize this fact and would prefer to sell their food and raw material exports to the free world when they can find a market there.

I have concentrated this survey on periods of time for which enough data is available to permit valid comparisons. But I think you are entitled to some roundup of the latest significant developments. The outside world turned from a surplus to a deficit balance of payments position vis-a-vis the United States in the fourth quarter of 1956, and the balance continued adverse in the first half of 1957. Although this affected various countries in different degrees and resulted partly from unusual, non-recurring factors (the Suez crisis, the 1956 freeze in Europe, restocking of cotton in 1956-57, etc.), the net effect on foreign countries' dollar reserves was unfavorable. If we allow for seasonal factors and disregard exceptional United States payments of about \$300 million to Venezuela for oil exploration rights, foreign countries lost about \$400 million during the second quarter of 1957 as a result of their transactions with the United States.

During the summer and early autumn of 1957 there have been unusually strong currents of exchange speculation. First France came under pressure and was forced in mid-August to make a partial exchange-rate adjustment. This, however, only temporarily checked the speculative drain and failed to bring about the hoped for massive return of funds. Recently, renewed pressure led the caretaker French government to complete what, by any definition except the formal one, was a devaluation of the franc.

Meanwhile, the brunt of bear speculation against the existing exchange rate structure had shifted to the UK and, to a lesser but still substantial degree, to the Netherlands, Belgium, and some other countries. The obverse of this speculation was reflected in

an unprecedented influx

an unprecedented influx of funds into Germany. Following the sharp rise in the Bank of England's discount rate (on September 19), sterling strengthened, and the movement of reserves from the UK to Germany has since been reversed. Nevertheless, the foreign exchanges are still in an unsettled condition, and gold and exchange reserves in Europe, while perhaps adequate in total, are clearly inadequate in the case of several major trading countries.

Some countries which depend on exports of one or two primary products for most of their foreign exchange income have been faced in the last several months with sharp declines in the markets for a number of world-traded commodities, notably non-ferrous metals. The post-Suez flattening of the growth curve of world petroleum requirements has interrupted the rise in oil revenues of the Middle East. Weakness of commodity markets not only restricts the buying power of individual primary producing countries; it could also have an impact on the foreign exchange earnings of the sterling area and of Belgium. In the case of the sterling area, to be sure, high receipts from wool and cocoa have in some degree offset losses of earnings from weaker commodities, and, of course, Europe in general stands to benefit, terms-of-trade wise, from lower import costs.

There are others here who will be in a better position than I to predict the course of commodity markets. But it is not an easy task even for the expert, for along with all the other variables, they must take into consideration the level of business activity in the United States.

I have already mentioned that the pace of economic development in many countries -- but certainly not all -- has stimulated imports beyond their capacity to earn foreign exchange. In recent months this tendency has been most acutely felt in France and Japan among the industrialized countries and India and Brazil among the primary exporters. But more generally there are signs that the extremely rapid growth of the past few years must slow down either as the forces that sparked that growth lose their momentum, or as countries find it necessary to apply the brakes through fiscal, monetary, and credit policy.

It is significant and encouraging that there has been no rush by foreign governments to tighten or reimpose import or exchange

controls



controls nor to single out United States or dollar-area products for discrimination. Moreover, there has been a general preference for combatting inflation and speculation by indirect controls operating through fiscal, monetary, and credit policy rather than by direct controls operating through the rationing of goods, capital, and foreign exchange.

These are encouraging signs -- signs that most of the world realizes that its recent twinges are growing pains and not symptoms of the paralysis suggested by the concept of a dollar gap.

It might be wiser for me to end on that optimistic note. But it seems to me there is a more interesting lesson to be drawn from some of these observations. The people of underdeveloped countries are demanding increases in their standards of living. There is almost no limit to their potential demand for consumers goods, including food. The pressures on their governments are almost certain to force programs for economic development that will keep their economies under inflationary stress.

To the extent that they can sell their exports in the United States and elsewhere they will ease that stress by imports, including imports of food in many cases. If their export markets are inadequate they will be forced to devote the major part of their own development efforts to increasing food production at home. Given their present abysmally low levels of per capita income and explosive population growth the limits of appetite are not likely to be reached in our lifetime. The demand for higher standards of living will not be satisfied by home production and imports combined. If the industrial countries of the Western World want to see the growth of healthy and useful countries in Asia and Africa they can both encourage those countries to develop their domestic production and make it possible for them to increase their imports. There will be plenty of room for both.